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TECHNOLOGY FOR PEOPLE

Crane safety device specialized company
SHINHAN ELECTRONICS

More safely More precisely More firmly

To create a safe future where healthy children can run and play freely, Shinhan Electronics keeps cranes safe through challenges and innovation.



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The products of Shinhan Electronics are customized products.

High safety and quality can be felt with the customized products set by a customer's environment through 100% pure technical capabilities.

ANNIVERSARY
40th

Since our founding in 1983, we had only walked one path. As a representative company of the crane safety equipment industry in Korea, it has established itself as a leading technology company.



Korea's First Development

- Developed electronic (LOAD CELL type) LOAD LIMITER
- Development of over load limiter for mobile crane
- Developed DIGITAL LASER STAFF (co-production with DSME)
- Development of low-cost tower collision device
- Developed AML (AUTO MOMENT LIMITER) for Jib Crane
- Acquired explosion-proof pin-type load cell certification
- Passed the OVER LOAD LIMITER test by the KOSHA
- Acquired ISO9001 electronic safety device certification
- Smart Crane Safety Management System

53 Crane Safety Device Patent & Certification

Main Patent Acquisition Contents

- Crane safety system
- Wireless over load limiter for crane hook mounting
- Wireless remote controller using 4-axis load cell
- Crane lifting operating system and using method
- Crane remote control system
- Wind direction and wind speed measuring device
- ISO 9001 certified by LRQA KOREA
- Fall prevention device for sky car
- Goliath Crane Skew Level Measurement System
- Precision level measurement system using laser
- Lever Block Overload Indicator
- Telescopic Lattice Boom for Crawler Crane
- Crane Safety Diagnostic System
- A lyotropic mixed liquor application system (for insulation blocks in ship cargo holds)
- Automatic transport system for insulation blocks in ship cargo hold
- A lyotropic mixed liquor device for insulation blocks in ship cargo hold
- Mixed bonding liquid application device for bonding insulation blocks
- Shipbuilding interior process standard simulator and decision support system
- Active Tilt Compensation Load Cell Device
- Load cell device for eccentric load compensation
- Apparatus and method for preventing fall of caterpillar construction equipment
- Caterpillar ground traction measurement system



The 23rd Protection Device Protection Equipment Quality Award Overload Prevention Device SH-2000SSC



Korea Occupational Safety and Health Agency Certification



Quality Management System Orion Registrar Inc. certification



ISO 9001:2008 Lloyd's Quality Management System Certification



Technology innovation SMEs



Greeting of Representative

We, Shinhan Electronics, go forward to explore with the world of the new technology of protecting the safety of the industrial site.

We stepped toward start as the specialized company which protects safety of the industrial sites in 1983. A creative new product is henceforth released through continued technical development and a powerful innovation, and it positioned in the leading company of industrial business manufacturing safety device for crane.

In intense competition and the business environment which changes suddenly, the safe device industry of a crane records a high growth rate and profitability, and attracts attention further.

The importance is increasing at the base of industrial prosperity according to the ripple effect of development of industry before and after beginning from basic unique technology especially.

The core, fountain technical capabilities accumulated without being satisfied with the crane safety device business' result of Shinhan Electronics are strengthened continuously, and training of the precision measuring instrument and the safe device business related to crane is accelerated.

Moreover, for production and the spread of the product suitable for global age highly raise the competitive capability drawing global ages, such as establishment for the production plant as like.

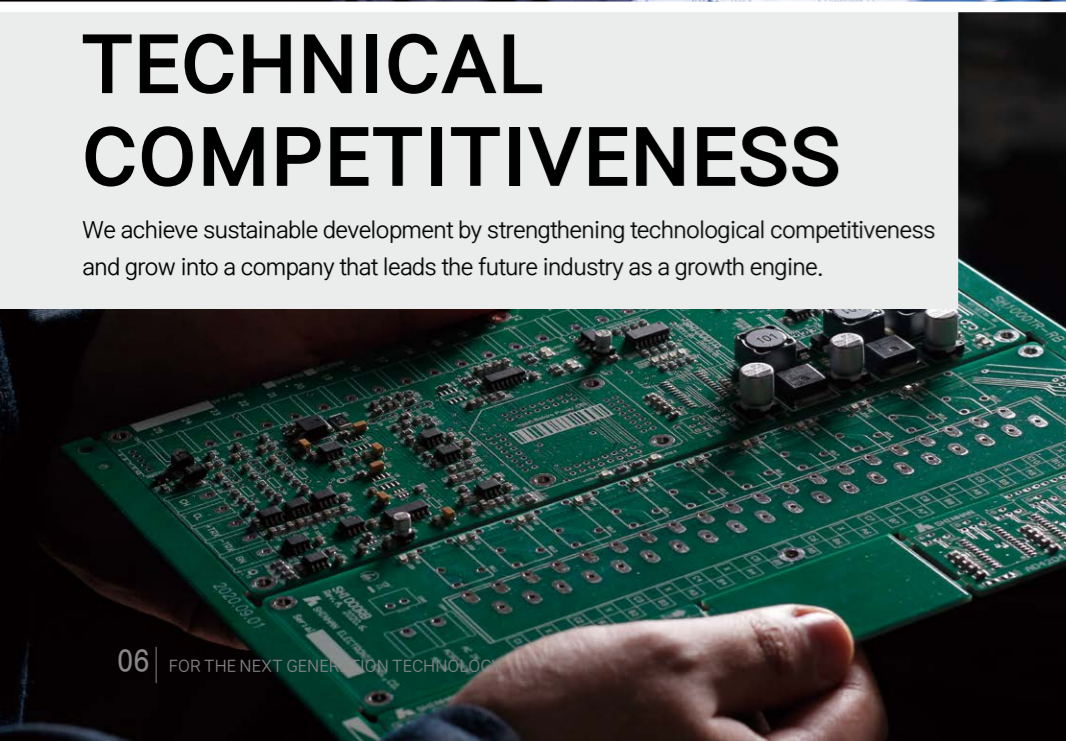
Dear customers! We, Shinhan Electronics, surely promise that we are trying to do our best to give you the highest satisfaction.

Representative & CEO
Chul-Kyu, Oh



TECHNICAL COMPETITIVENESS

We achieve sustainable development by strengthening technological competitiveness and grow into a company that leads the future industry as a growth engine.



STRATEGIC TECHNOLOGY

The safety of World industrial sites is ensured by strategic technical development.

If we have no unique technology which can carry out ourselves in case of the time of infinite competition, it does not get used to top technology in the world. We are concentrating on maintenance of the production technology of a high value-added product, and unique technology by continuous technical innovation, and make strongly the growth base of the future. Everybody can make products but ordinary persons cannot do them. Professionals' excellence in SHINHAN ELECTRONICS Co.,Ltd. can be found in the products developed by it for many years. Our accumulated technical skills that there have been never a 'plan B' keep customers safe.



Shipbuilding and offshore safety equipment



Shipping and construction fields safety equipment



Heavy industry safety equipment



Defense industry safety equipment

Development & Management

- Systems to improve technical skills
- Knowledge management(KMS)
- Excellent human resources
- Risk management
- Standard management

Customer service

- Reforming consciousness and innovation of customer services
- Customer-oriented innovation
- Strengthens soft capability to satisfy customer needs



INNOVATION & CHALLENGE

For continuous development, we are practicing innovation and challenge with creative thinking and endurance.



The 23rd Protection Device Protection Equipment Quality Award Overload Prevention Device SH-2000SSC



Received a excellent quality Award of safety & prevention Devices for Over Load Limiter of Mobile Crane. SH-2000



Received a Excellent Award for Over Load Limiter (6th Safety Devices Quality Contest : Model No.SH-1000A)by KOSHA



Received a Incentive Award at 11th Safety Devices' Quality Contest by KOSHA SH-3000



Received a Excellent Award at the quality evaluation contest for safeguard equipment and personal safe gear, SH-2000HT

Change and Innovation was made with continuous question and Challenge.

Challenge and Efforts of Sweat for 30 years! Numerous patent rights and awards are the business results of all the staff and employees. For the responsibility of absolute safety in industrial sites, ShinHan Electronics has developed and provided the more practical and safer products through the incessant research and experiment for 365 days all the year round. ShinHan Electronics will also continue to contribute to the world and leave a more significant trace of effort for the future onwards.

History

- 2021 01 Mixed bonding liquid application device for bonding insulation blocks
- 2020 01 Shipbuilding interior process standard simulator and decision support system
- 2019 11 Load cell device for eccentric load compensation
- 2019 10 Caterpillar ground traction measurement system
- 2019 07 Apparatus and method for preventing fall of caterpillar construction equipment
- 2019 06 A lyotropic mixed liquor device for insulation blocks in ship cargo hold
- 2019 04 Automatic transport system for insulation blocks in ship cargo hold
- 2019 04 A lyotropic mixed liquor application system (for insulation blocks in ship cargo holds)
- 2018 05 Acquired Patent No.10-1863115 of Smart crane safety management system
- 2017 08 Acquired Patent No.10-1767734 of Crane safety diagnosis system
- 2016 07 The 20th Quality Award protection safeguards Fair Prize Award
- 2016 04 SH-750 series Korea Occupational Safety and Health Agency safety certification
- 2015 07 SH-1200 series Korea Occupational Safety and Health Agency safety certification
- 2015 04 European certification standards LOAD LIMITER & MOMENT LIMITER CE Certification
- 2014 08 Acquired Patent No.10-1428475 of Wire cutting load cell for high place working vehicles
- 2014 05 Acquired Patent No.10-1397394 of Overturn preventing device of high place works car
- 2013 12 Acquired Certificate of 2008 Edition for ISO 9001 by LRQA, a member of the Lloyd's Register Group, for load limiter device & load moment limiter device
- 2013 10 Tested for Manufacturing & Operating 80ton capacity Crawler crane by SHINHAN HUVANCE Co.,Ltd. affiliated with the Shinhan Electronics
- 2012 07 Acquired Patent No.10-1168568 of Anemoscope & Anemometer
- 2012 05 Acquired Certificate (Patent No.1144718) of Remote Control System of the crane
- 2011 09 Acquired Certificate (Patent No.1064625)of the lifting management system of the crane and its using method
- 2011 06 Acquired Certificate (No.1044036) of 4-axis type wireless remote control controller using a load cell
- 2010 01 Supplied SKY crane's overturn prevention device large quantity In Korea
- 2009 07 Received a Excellent Award at the quality evaluation contest for safeguard equipment and personal safe gear
- 2008 11 Acquired Patent of crane hoisting management system (Joint application with Samsung Co.)
- 2008 09 Acquired Patent No.10-080624 of Wireless overload protection device to be installed to crane's hook
- 2008 07 Acquired Patent No.10-0845128 of Crane safety device system
- 2007 12 Acquired Patent of Digital Laser staff device (Joint application with Daewoo Shipbuilding & Marine Eng.Co.,Ltd.)
- 2007 06 Developed a Lower price Type Collision Protection Device for Tower Crane first in Korea (Received a Incentive Award at 11th Safety Devices' Quality Contest by KOSHA)
- 2006 05 Exported ShinHan's Products to China, Singapore and Malaysia (Began to supply it large quantity through maintaining ShinHan's technical power and reliability with overseas)
- 2005 01 Completed development of Laser Detector & began to supply it (Co-Works with DaeWoo Shipbuilding & Marine Engineering Co.,Ltd.)
- 2004 10 Operated Chinese Local Factory and acquired ISO 9001 in China (UKAS)
- 2002 07 Received a Excellent Award for Overload Limiter(6th Safety Devices Quality Contest: Model No.:SH-1000A)by KOSHA
- 2001 08 Updated and acquired Certificate of 2000 Edition for ISO 9001
- 2001 04 ShinHan's Chinese Local Factory acquired Safety Qualification Certificate for Auto Overload Limiter by China (5 Safety Items)
- 2000 03 Acquired Safety Qualification Certificate named "S MARK" by KOSHA (15 Safety Items)
- 1998 08 Acquired Electronic Safety Device Certificate of ISO 9001 among the same industry first in Korea
- 1998 07 Received a excellent quality Award of safety & prevention Devices for Overload Limiter of Mobile Crane
- 1991 10 Began to supply A.M.L for Mobile Crawler & hydraulic Crane first in Korea
- 1991 01 Acquired Safety Qualification Certificate of Auto Moment Limiter for Tower Crane and Jib Crane from KOSHA
- 1990 05 Acquired Safety Qualification Certificate for Overload Limiter from KOSHA (Korea Occupational Safety and Health Agency)first in Korea.
- 1988 03 Exclusively began to supply Load Limiter to Daewoo Shipbuilding & Marine Engineering Co.,Ltd. Hyundai Heavy industries Co.,Ltd, HanJin Heavy Industries Co.,Ltd. And DooSan Heavy Industries Co.,Ltd.
- 1987 11 Developed Load Cell application Load Limiter first in Korea
- 1986 04 Completed development of Moment Limiter for jib crane, and Exclusively contracted and supplied ShinHan's Products to Hyundai Heavy Industries Co.
- 1984 01 Established Company named ShinHan Electric Industry Co. (Products name : Load Limiter)
- 1983 11 Completed development of Electric Load Limiter for crane and hoist

A value beyond safety

PARTNER

In industrial development, technology advances and a network is formed between companies, and the synergy is activated to obtain infinite growth engines. And that development must be based on safety. We will become safety and hope for customers who open tomorrow with Shinhan Electronics!



Major Clients



Other and with many customers and with.

WIRELESS CHECK REMOTE CONTROL SYSTEM

WACON300R



Form Model: WACON300, Volume Rating: J-1, Certification numbers: 10-AV2BJ-0225



Selection depends on the preference of the user.

LCD COLOR TOUCH SCREEN	GRAPHIC LCD TYPE	SEGMENT TYPE
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STRAIN GAGE	FILTERING	MICRO PROCESSOR	WATCHDOG TIMER	DATA LOGGING
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A safe accident is prevented by check, such as checking products for abnormalities of an overload protection device, a work history, an equipment history, and calibration work, and setting without any boarding at the crane.

The functional information on LOAD CELL and an overload protection device can check on wireless by all the information on LOAD SYSTEM installed in crane at the site through transceivers of each overload protection device by transceiver of a ground operator. The safe accident by check, such as checking products for abnormalities of an overload protection device, a work history, and an equipment history and its setting can be prevented in advance without getting board at each crane. Moreover, convenience was maximized by the ability of the information on what many cranes to be checked with one portable wireless transceiver.

Main function for system

- Overload protection device's check is always possible by 2.4GHz RF module.
- Self-diagnosis is possible, also the data transfer is possible without any equipment's driving.
- Many cranes check by one check controller is possible.
- Summary information through the LCD screen can be checked.
- Record of reference and event situation can be downloaded by PC connection.
- Access control by inspector checking grades.
- Selection of a check controller is possible.(2.5 inch, 4.3 inch)

Usability

- Boarding the crane is unnecessary for checking overload protection device.
- Record reference for overload can be reflected in the safety training.
- Analysis of installation investment of equipment by work history analysis is possible.
- Constant check for overload protection device will be reservation of work safety.

Excellence

- In order to check like the existing equipment, don't get aboard the crane but uses portable equipment.
- Always maintain the newest performance of an overload protection device by checking products abnormalities of an overload protection device.
- The working history preservation and an electrical overload history need, and establish the plan of suitable arrangement of equipment, and utilization plan. And productivity is increased by efficient arrangement of safety for equipment.
- Make the environment where an overload protection device can always be worked much more safely and conveniently at the industrial site.



CONVERTER SBCA-4



CONTROLLER



LOAD CELL



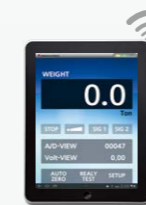
LARGE DISPLAY



WIRELESS CHECK REMOTE CONTROLLER



MONITOR



Tablet PC



Smartphone



Netbooks

WIRELESS CHECK REMOTE CONTROL SYSTEM

Data such as noise and displacement including crane basic information and sensor information are recorded. In addition, safety inspection history is stored and a database can be built to improve safety management and work efficiency.



Crane information is seen at a glance with a wireless transceiver without boarding!

All information without boarding a load of crane systems installed in the field, Abnormalities of the overload protection device, Work history and equipment history, Corrective action, such as a check or a setting as possible to maximize the ease of the system. Preventing a safety accident due to the unnecessary board in advance, Portable radio transceiver You can find lot of information at once crane.

Features

- In order to check like the existing equipment, don't get aboard the crane but uses portable equipment.
- Always maintain the newest performance of an overload protection device by checking products abnormalities of an overload protection device.
- The working history preservation and an electrical overload history need, and establish the plan of suitable arrangement of equipment, and utilization plan. And productivity is increased by efficient arrangement of safety for equipment.
- Make the environment where an overload protection device can always be worked much more safely and conveniently at the industrial site.
- The present states of all the crane are observable at a glance in an office.

DIVISION	CONTROLLER	MONITOR (Window CE)	WIRELESS CHECK REMOTE CONTROLLER
MODEL No.	SH-1000 series	SH-1000 series	WACON300R
OPERATING	OPERATING	TOUCH SCREEN	TOUCH SCREEN
DISPLAY	DISPLAY	800 X 480 (7") color graphic LCD with Back LIGHT WEIGHT, LIMIT WEIGHT	2.4" 320×240 HIGH QUALITY LCD with BLACK LIGHT
POWER SUPPLY	AC110/220V ± 10%, 50/60Hz, 1Phase	DC 12V	1.5V Alkaline battery 3ea
POWER CONSUMPTION	APPROX. 20W	APPROX. 20W	Approx. 0.4W
RELATIVE HUMIDITY	97% RH	97% RH	97% RH
TEMP. RANGE, COMPENSATED	-20°C ~ 60°C	-10°C ~ 60°C	-20°C ~ 60°C
TEMP. RANGE, SAFE	-30°C ~ 80°C		-30°C ~ 70°C
SYSTEM ACCURACY	Less than ±3%		
OVERLOAD DETECTION TIME	Within 1Sec		
SIGNAL OUTPUT		- SIG1 : (DRY CONTACT 1a 1b 250V 5A) Adjustable - ALARM : (DRY CONTACT 1a 1b 250V 5A) Adjustable - OVER : (DRY CONTACT 1a 1b 250V 5A) Adjustable - RS-232C Communication support	
MALFUNCTION PREVENTION	Prevent malfunction caused by vibration from the MOMENT load and moment at work CRANE		
COVERAGE			Within 70M (Open space)
FUNCTION			TOTAL DISPLAY, EACH WEIGHT DISPLAY
OPERATING TIME			Full operating 10 hours

※ Dimensions and specifications can be changed without prior notice to improve performance.

INTELLIGENT CRANE OPERATION ANALYSIS SYSTEM



The intelligent crane operation analysis system is a system for safe operation that can improve work efficiency by storing and analyzing the operation data of multiple overhead cranes. By comparing the replacement cycle through the actual operation analysis of the crane for the consumables that are replaced according to the cycle on a monthly or yearly basis, time and economic costs can be saved.

Smart Load Information System

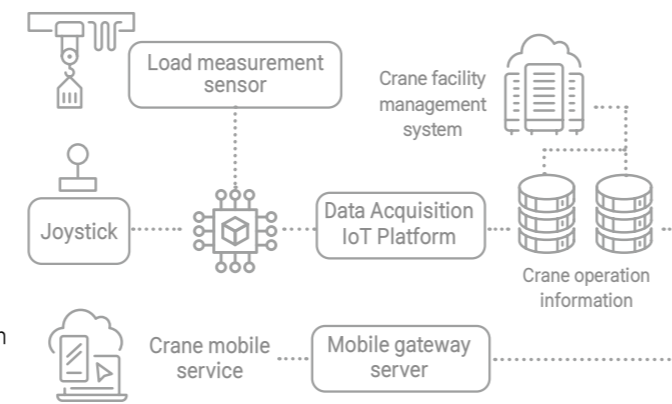
- Crane overload cutoff above rated capacity
- Real-time load information transmission
- Calculation of moving distance through driving /sidewise joystick input
- Real-time diagnosis of crane overload rate over time
- Real-time diagnosis of overload rate according to crane travel distance

Crane mobile service

- Maintenance work instruction
- Crane operation status
- Danger/Alarm Information

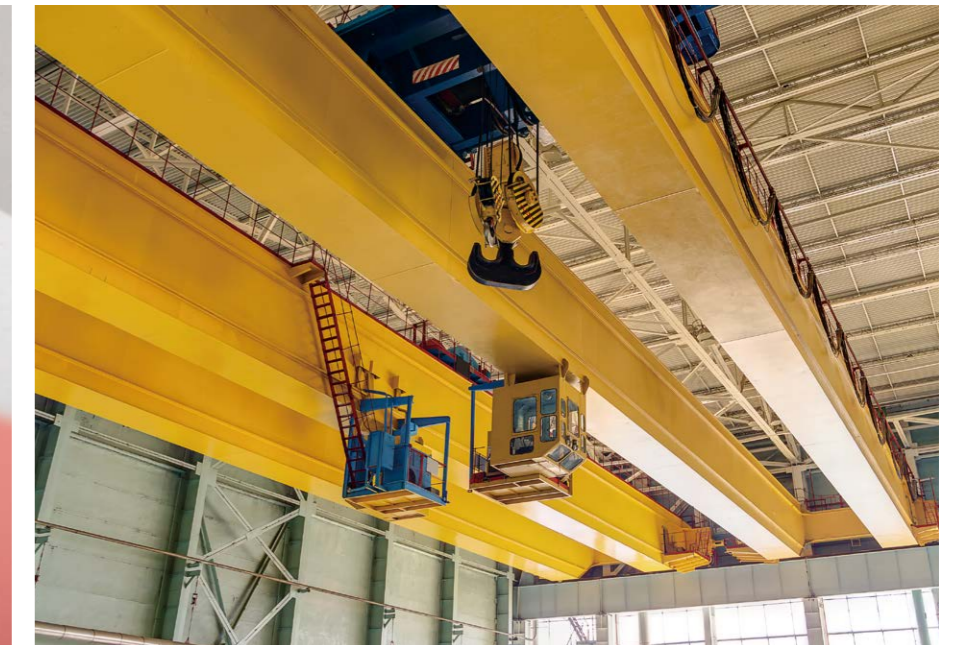
I.o.T

- Real-time load information
- Crane operation performance
- Crane operating status
- Malfunction and alarm information



NON-VISIBLE LASER DISTANCE MEASUREMENT SENSOR

SH-LD20



It is a sensor that measures and expresses the distance of the front object in real time through the ToF method with a wavelength of 850nm. The user can set up to five wanted distance values. By outputting a contact point according to the distance measured in real time, an output signal can be generated at a wanted distance. Accidents can be prevented with collision warning and anti-collision control when driving between cross-street and upper and lower cranes.

Division	SH-LD20
Maximum measuring distance	Max 20m
Resolution	1cm
Accuracy	6cm(within 5m), 2%(5m or more)
Data Output Rate	Up to 100 Hz
Wavelength	850nm
Beam Diameter	52cm * 52cm(at 10m)
Output	Relay Output(5ea)
Input Power	12 ~24VDC
Weight	about 200g
Working Temperature	-10°C ~ +60°C
Operation Temperature	-20°C ~ +80°C

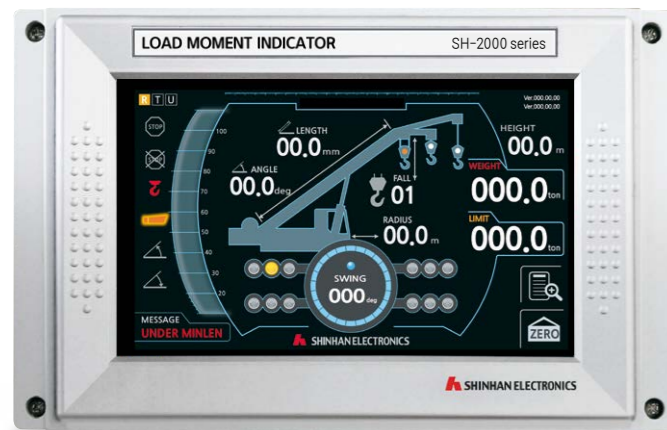
LMI LOAD MOMENT INDICATOR

Only for the use of Mobile crane, Overload protection device

SH-2000 series

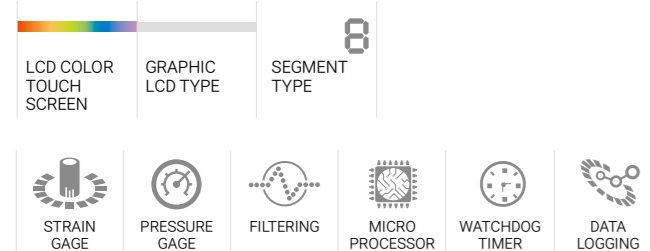


Accurate automatic load detection is to provide a more convenient and efficient working environment for the operator to increase its competitiveness.



LCD COLOR 7" TOUCH 840x840 SCREEN TYPE MONITOR 220Wx140Hx80D

Selection depends on the preference of the user.



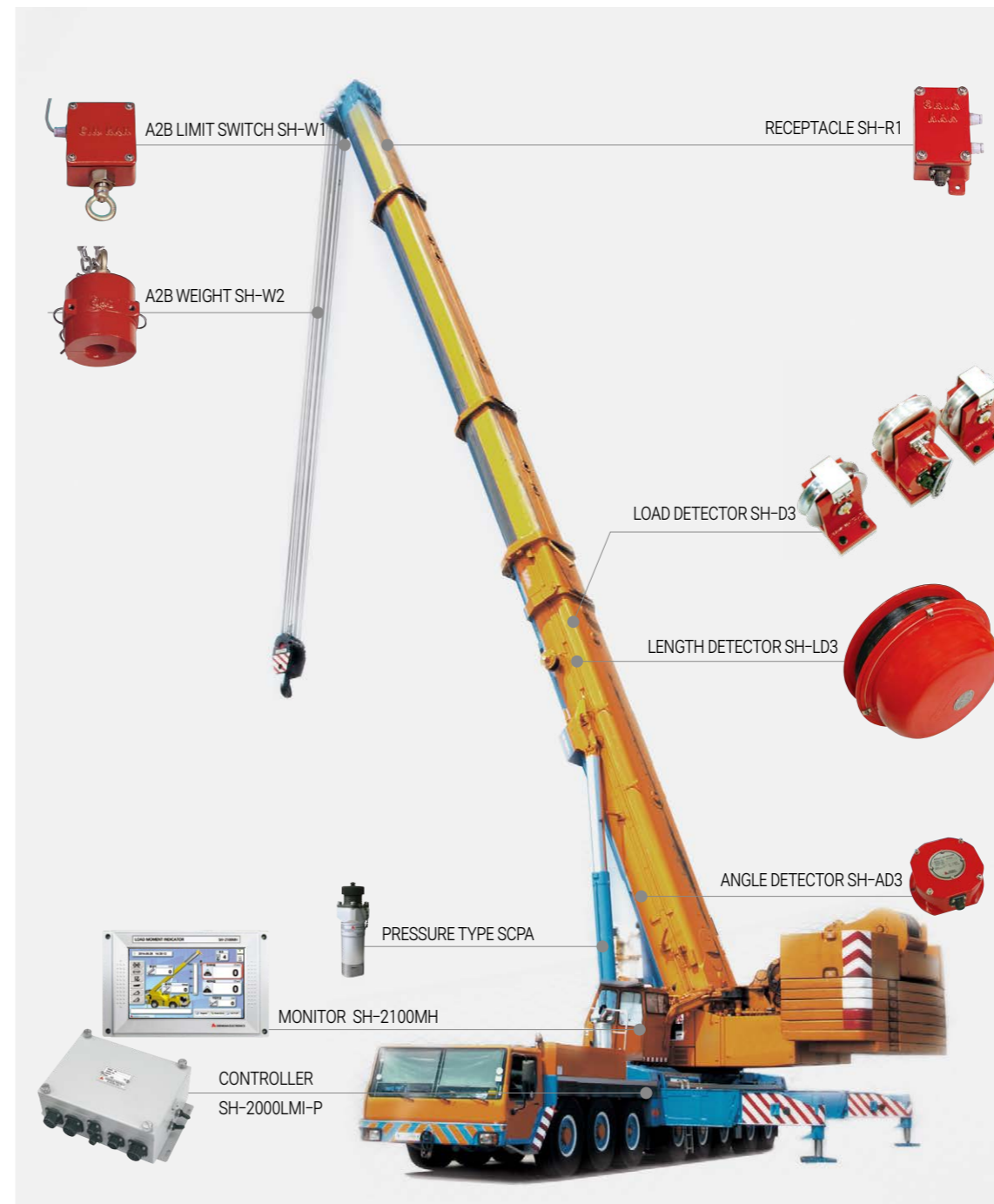
LOAD MOMENT INDICATOR is safety device for crane. That is movable hydraulic crane, crawler, cargo crane installation. And crane moment and detect overloaded to prevent overturn or other incidents. Characteristics of movable cranes, when jib or boom of the way, work angle changes from time to time, each MOMENT control of the center of the crane by hard work to do is necessary. MOMENT amount of the center of crane is difficult to determine with the driver's sense and view, So, It shall be automatically limits safely, By installing a variety of sensor. SH-2000 LMI is a wire rope TENSION LOAD CELL detects the weight to be lifted from HOOK. At this time, the MOMENT amount calculated from the center of the crane, such as length and angle of the JIB, BOOM and taking the automatic control output, And it provides information to the driver by displaying the operating conditions.

Features

- Accurate load detection system using a PRESSURE GAGE
 - The correct load is detected by using the strain gage type load cell.
 - The correct location of trolley is detected by using the high accuracy potentiometer.
 - Filtering function for protecting crane's shaking (The moment malfunction protection device).
 - Microprocessor & Watchdog Timer are equipped inside.
 - Additional option function by an order of user (wind speed, hook height etc.)
- DISPLAY :
- Displays the current load(0.1 Ton unit)
 - Load limit represented by the radius calculation operation according to the length of the boom and the angle of the boom(0.1 Ton unit)
 - Displays the current working radius(0.1M unit)
 - Display of boom angle(0.1° unit)
 - Display of boom length(0.1M unit)

Division	Controller	MONITOR SPECIFICATIONS	MONITOR TYPE
Model	SH-2000LMI-P (Hydraulic 3 Sheave Type) SH-2000LMI-H (Hydraulic Pressure Type) SH-2000LMI-T (Crawler Tension Type) SH-2000LMI-P (Crawler 3 Sheave Type) SH-2000LMI-H (Cargo Pressure Type) SH-2000LMI-P (Cargo 3 Sheave Type) SH-2000S (SKY CRANE)	SH-2100MH-Graphic/Touch SH-2100MH-Graphic/Touch SH-2100CH-Graphic/Touch SH-2100CH-Graphic/Touch SH-2100CH-Graphic/Touch SH-2100CH-Graphic/Touch SH-2100TS-Graphic/Touch	7 inch 7 inch 7 inch 7 inch 5.6 inch(4.3 inch, 7 inch Changeable) 5.6 inch(4.3 inch, 7 inch Changeable) 5.6 inch
Power supply voltage	DC +12 ~ 24V 1A	DC+12 ~ 24V 1A	Feature
Operating temperature	-20°C ~ 60°C	-20°C ~ 60°C	- Securing reliability by using 8-bit RISC TYPE MCU
Humidity	95%RH	95%RH	- Excellent readability by using GRAPHIC LCD
DISPLAY	-	Current load : 4 digit (XXX.X ton) Limit load : 4 digit (XXX.X ton) Working radius : 3 digit (XXX.X m) Boom angle : 3 digit (XX.X deg) Rope quantity : 2 digit (XX fall) Error Message	- Korean notation for domestic users (English notation available) - Various settings and settings are easy by using the MEMBRANE KEY BOARD on the front of the monitor - When KEY SETTING, the corresponding explanation is displayed on the screen, so it can be operated easily - Built-in internal WATCHDOG - Working history storage function (OPTION)
Signal output	1a(NO), 1b(NC)24V 3A	Common alarm : RED LED Cut off : RED LED Upper limit angle : RED LED Lower limit angle : RED LED Over lifting : RED LED	
Quality of the material	SS41	AL alloy	
System extent		±1% ~ ±3%	

※ Dimensions and specifications may be changed without prior notice to improve performance

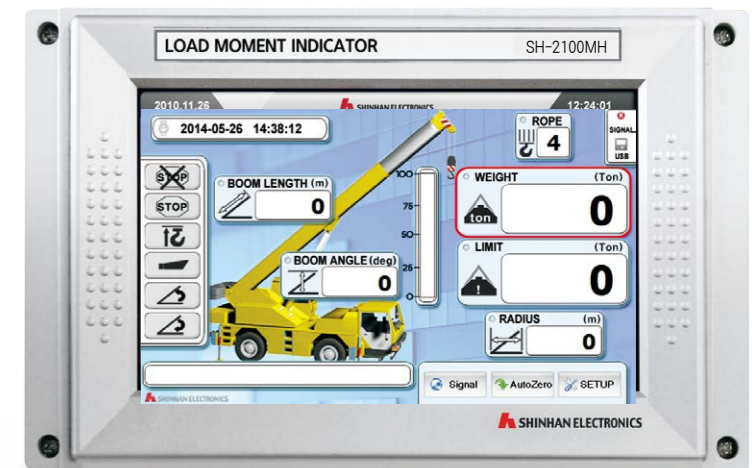


LMI SH-2000LMI-P [3 Sheave Type] SH-2000LMI-H [Pressure Type]

Overload protection device for HYDRAULIC CRANE

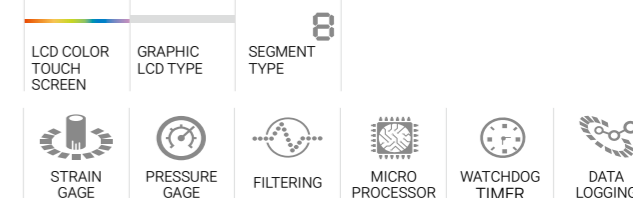


Form Model	SH-2000LMI-P	Volume Rating	J-1	Cerification numbers	15-AV2BJ-0006
	SH-2000LMI-H		J-1		15-AV2BJ-0008



MONITOR 220(W) x 140(H) x 80(D)

Selection depends on the preference of the user.



Selection of the load sensor

DIVISION	WIRE ROPE'S DIAMETER	LOAD DETECTOR	LOCATION	NOTE
How to detect load by hydraulic pressure force of boom cylinder	-	SCPA-300, 500	Boom derrick cylinder	Pressure sensors
How to detect load by tension force of wire rope	Up to Ø14~Ø26	SH-D3	Wire rope of the upper part of boom	Load cell

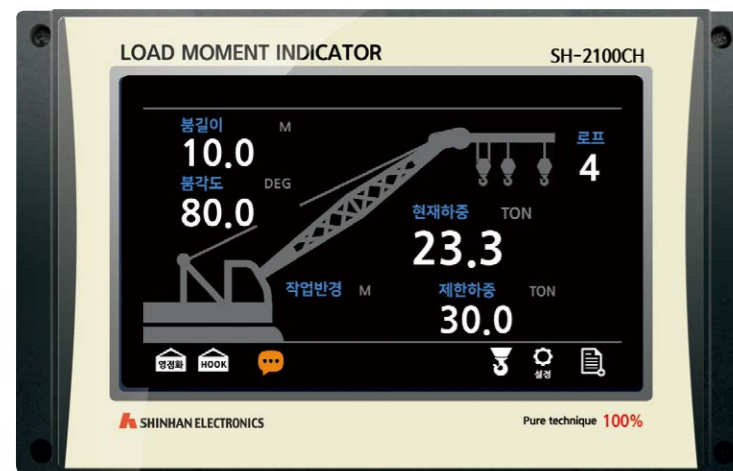
※ Please consult us when selecting LOAD SENSOR.

LMI SH-2000LMI-T [Tension Type] SH-2000LMI-P [3 Sheave Type]

Overload protection device for CRAWLER CRANE



Form Model	SH-2000LMI-T	Volume Rating	J-1	Cerification numbers	15-AV2BJ-0007
	SH-2000LMI-P		J-1		15-AV2BJ-0006



MONITOR 310(W) × 120(H) × 95(D)

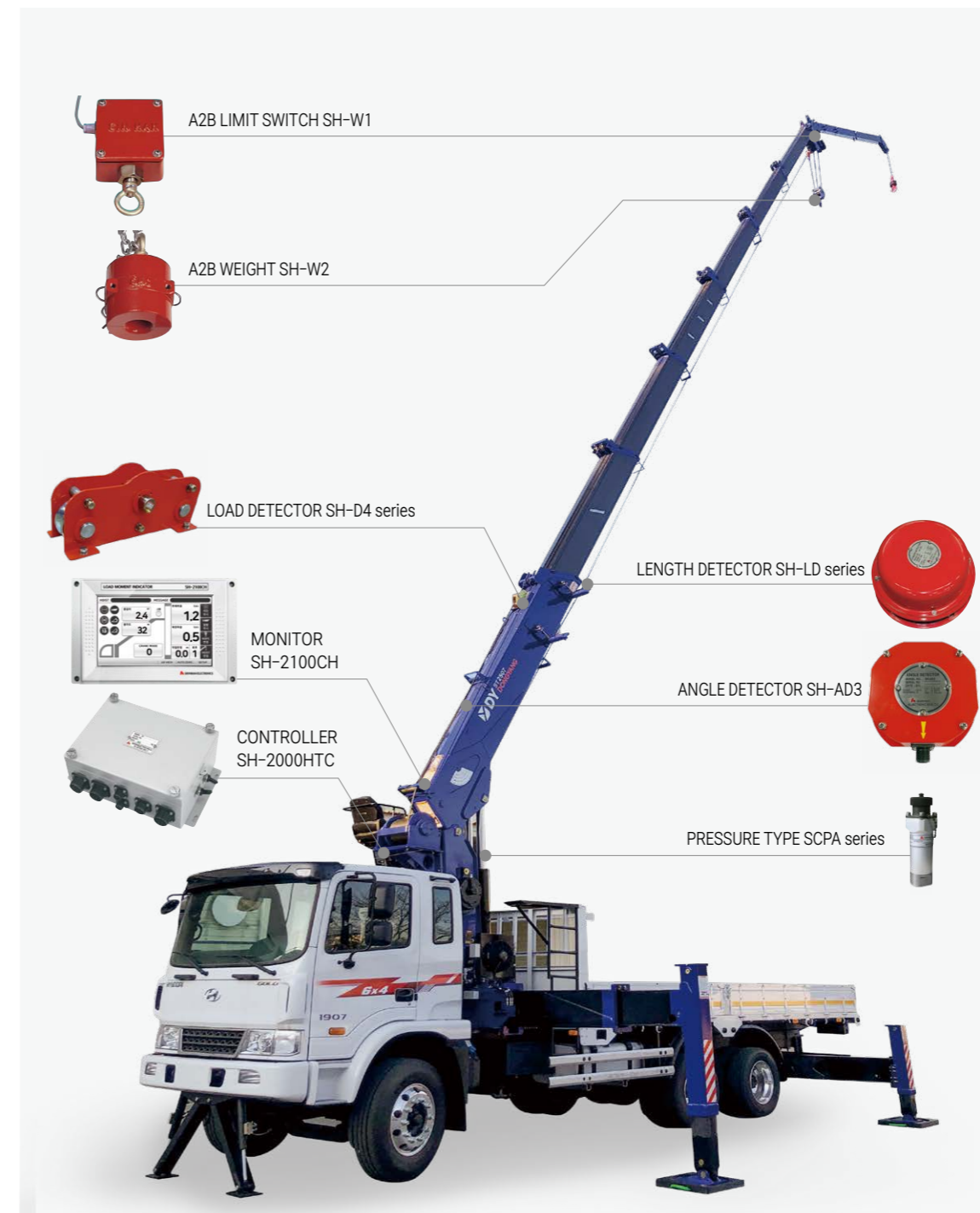
Selection depends on the preference of the user.

LCD COLOR TOUCH SCREEN	GRAPHIC LCD TYPE	SEGMENT TYPE
STRAIN GAGE	FILTERING	MICRO PROCESSOR
		WATCHDOG TIMER
		DATA LOGGING

Selection of the load sensor

DIVISION	WIRE ROPE'S DIAMETER	LOAD DETECTOR	LOCATION	NOTE
How to detect load by tension force of wire rope	-	TPC series	Socket for wire rope end	Load Cell
	∅14 ~ ∅32	SH-D2	Wire rope of the upper part of boom	
	∅6 ~ ∅16	SH-D4	Wire rope of the upper part of boom	

※ Please consult us when selecting LOAD SENSOR.

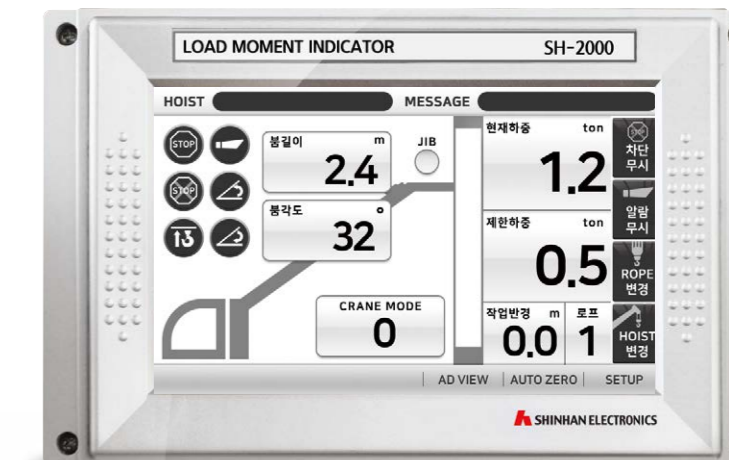


LMI SH-2000LMI-P [3 Sheave Type] SH-2000LMI-H [Pressure Type]

Overload protection device for CARGO CRANE



Form Model	SH-2000LMI-P	Volume Rating	J-1	Cerification numbers	15-AV2BJ-0006
	SH-2000LMI-H		J-1		15-AV2BJ-0008



Selection depends on the preference of the user.

LCD COLOR TOUCH SCREEN	GRAPHIC LCD TYPE	SEGMENT TYPE
STRAIN GAGE	FILTERING	MICRO PROCESSOR
		WATCHDOG TIMER
		DATA LOGGING

Selection of sensor for boom length

BOOM RETRACTION LENGTH	LENGTH DETECTOR	NOTE
1~9M	SH-LD5	1P SHIELD, WIRE ROPE
1~24M	SH-LD4	1P~4P SHIELD
1~55M	SH-LD3	1P~4P SHIELD (When using 3P over 35m standard)

Selection of the load sensor

DIVISION	WIRE ROPE'S DIAMETER	SENSOR
★How to detect load by hydraulic pressure force of boom cylinder	-	SCPA-300, 500
How to detect load by tension force of wire rope	∅8, ∅10	SH-D4
	∅14, ∅18	

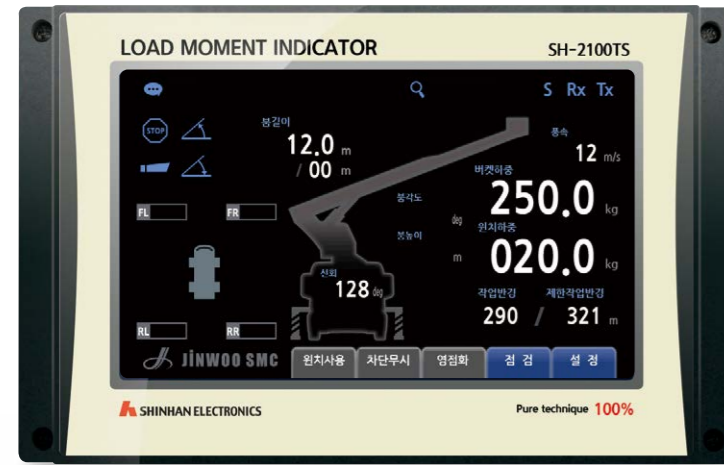
※ Please consult us when selecting LOAD SENSOR.

LMI SH-2000S SH-2000L

Overload protection device for SKY CRANE



Form Model	SH-2000S	Volume Rating	J-1	Cerification numbers	15-AV2BJ-0009
	SH-2000L		J-1		16-AV2BJ-0005



MONITOR 310(W) × 120(H) × 95(D)

Selection depends on the preference of the user.

LCD COLOR TOUCH SCREEN	GRAPHIC LCD TYPE	SEGMENT TYPE
STRAIN GAGE	FILTERING	MICRO PROCESSOR
WATCHDOG TIMER	DATA LOGGING	

Selection of sensor for boom length

BOOM RETRACTION LENGTH	LENGTH DETECTOR	NOTE
1~9M	SH-LD5	1P SHIELD, WIRE ROPE
1~24M	SH-LD4	1P~4P SHIELD
1~55M	SH-LD3	1P~4P SHIELD (When using 3P over 35m standard)

※ The length sensor of a boom is used for length detection, and for signal transfer



WEIGHT INDICATOR BL-485

SBHM-3T

LENGTH DETECTOR SH-LD5

OUT OF SCOPE

ANGLE DETECTOR SH-AD3

MONITOR SH-2100TS

CONTROLLER SH-2000S

OUTRIGGER LENGTH INDICATOR OL-400P

OUTRIGGER SENSOR

SENSOR FOR INSTALLATION IN GOOD CONDITION OF JACK

SWING SENSOR

A2B LIMIT SWITCH SH-W1

CONVERTER

A2B WEIGHT SH-W2

LOAD DETECTOR SH-D4 series

LENGTH DETECTOR SH-LD5

ANGLE DETECTOR SH-ADx90

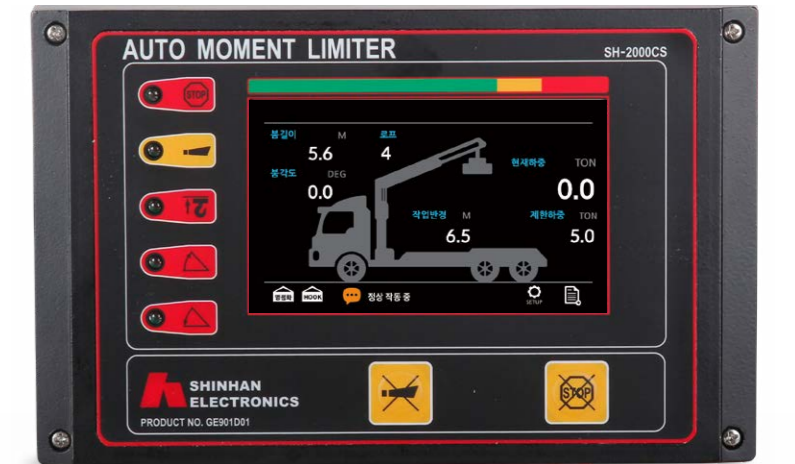
CONTROLLER WITH MONITOR SH-2000CS/CSC

LMI SH-2000CS SH-2000CSC

Overload protection device for WRECK CAR



Form Model	SH-2000CS	Volume Rating	J-1	Cerification numbers	17-AV2BJ-0005
	SH-2000CSC		J-1		18-AV2BJ-0008



MONITOR 310(W) × 120(H) × 95(D)

Selection depends on the preference of the user.

LCD COLOR TOUCH SCREEN	STRAIN GAGE	MICRO PROCESSOR
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Selection of sensor for boom length

BOOM RETRACTION LENGTH	LENGTH DETECTOR	NOTE
1~9M	SH-LD5	1P SHIELD, WIRE ROPE
1~24M	SH-LD4	1P~4P SHIELD
1~55M	SH-LD3	1P~4P SHIELD (When using 3P over 35m standard)

Selection of the load sensor

DIVISION	WIRE ROPE'S DIAMETER	SENSOR
How to detect load by tension force of wire rope	ø8, ø10	SH-D4
	ø14, ø18	

※ Please consult us when selecting LOAD SENSOR.

AUTO MOMENT LIMITER SYSTEM FOR BARGE CRANE

Working Range limitation system of lifting loads for barge crane SH-7109A



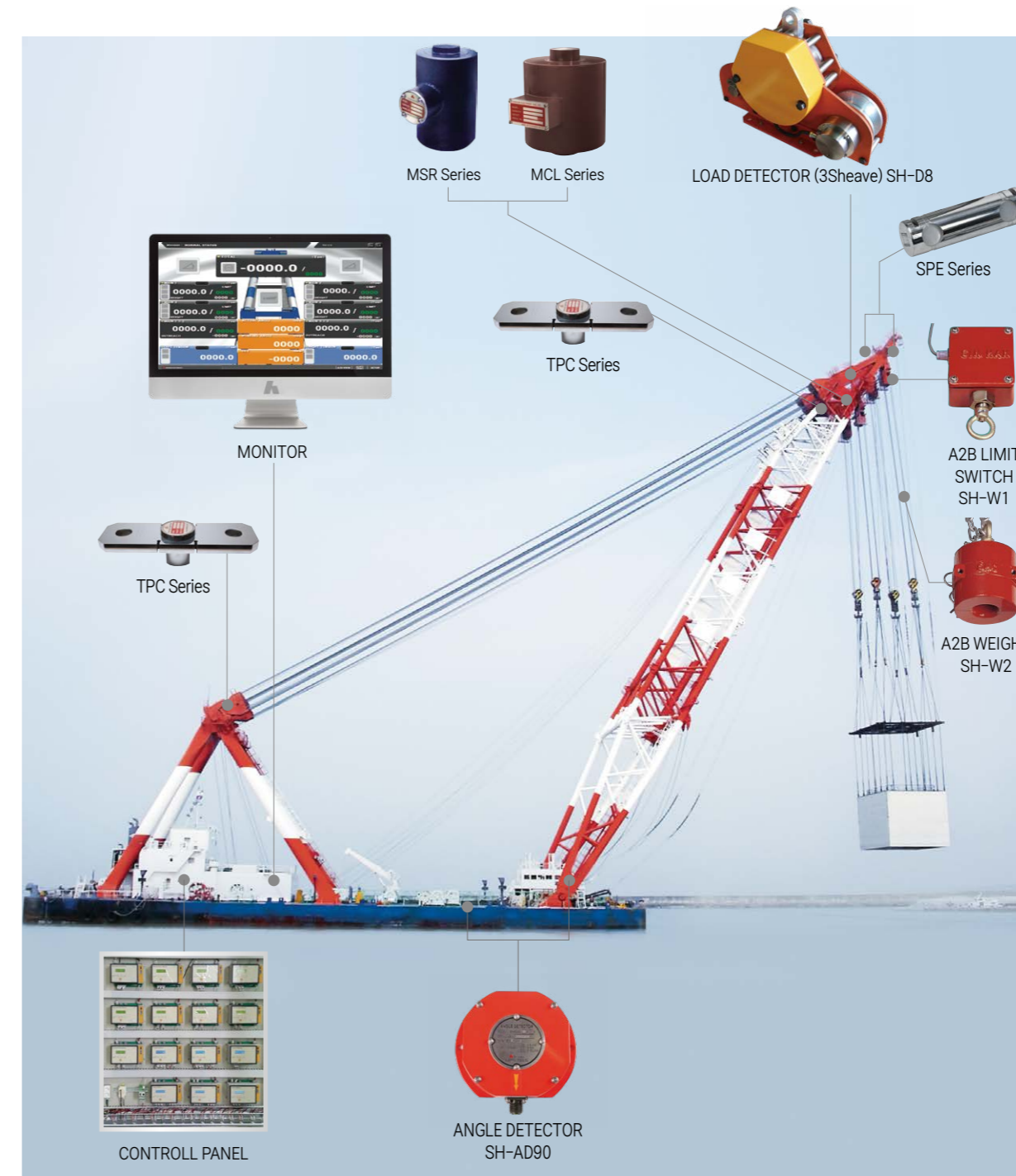
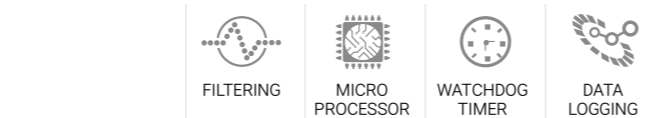
Working efficiency can be maximized by the customized limited system that the large structure is lifted more safely more precisely.

This system is automatic moment limiter for floating crane, by using a load cell the load is detected and by using a jib angle sensor is used, the angle of the boom is detected. So this equipment is to limit the lifting loads according to working radius. It is possible to do more safer work than when lifting the large structure, by showing all operational circumstances to its 7inches large screen.

Optional & Configuration Item

DIVISION	OPTION	REMARKS
Monitor size	17" LCD MONITOR / 19" LCD MONITOR	1 additional basic installation possible
Load detection	Basic specifications	Add hoist can be installed depending on quantity
Boom angle detection	Basic specifications	Alone boom, the boom can be selected in the left and right
Hook height detection	Option specifications	Add hoist can be installed depending on quantity
Boom tension detection	Option specifications	Quantity selectable in accordance with the tension boom position
Work history management	Option specifications	Data can be saved as excel
External contact output	Basic specifications	PLC and interoperable contacts and analogue output available
Wireless remote support	Option specifications	Remote support using a wireless Internet network

※ Dimensions and specifications can be changed without prior notice to improve performance.

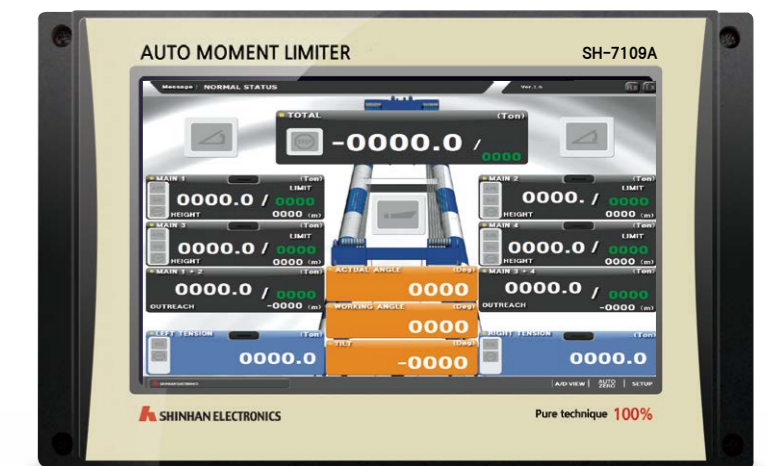


AML SH-7109A



FOR LOADING CRANE

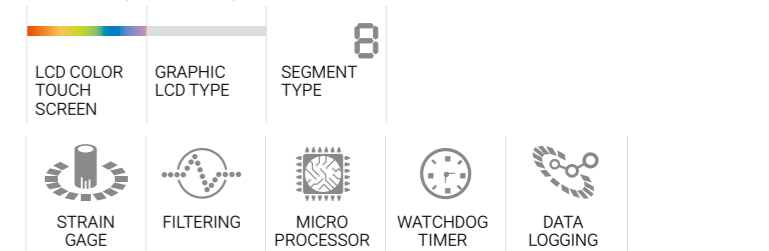
Form Model	SH-7109A	Volume Rating	J-1	Certification numbers	09-AV2BJ-0017
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MONITOR 19inch, 24inch



Selection depends on the preference of the user.



AML AUTO MOMENT LIMITER

Only for the use of tower crane, Overload protection device SH-1000 series

SH-1200T



DIVISION	CONTROLLER	
Hook	1	
Load cell	1	
Sensor(POTENTIOMETER)	1	
Display	WEIGHT,LENGTH,LIMIT	
Signal output	ALARM,OVER,50% / SIG 1~4(OPTION)	- Ensuring reliability used micom
Relay spe.	DRY CONTACT AC250V 3A(1a1b)	- SIMPLE KEY BOARD SET
Power supply	AC 100~240V ± 10%, 50~60Hz, single-phase	- 4 ~ 20mA for external INTERFACE(OPTION)
Power consumption	APPROX. 60W	- Wind speed sensors and can be connected(OPTION)
Humidity of the environment in use	less than 95% RH	- Hook height can be detected(OPTION)
Usage temperature range	-30°C~+60°C	- DATA LOGGING SYSTEM (OPTION)
Closure temperature	-40°C~+70°C	
System accuracy	3~5%	
Detection time	Within 1 Second	
Material	DIE CASTING	

SH-1000T-T



DIVISION	CONTROLLER	
Model	SH-1000T-T (T-TYPE)	
Power supply	AC 110/220V ± 10% (SELECTOR), 50/60Hz 1Ph	
Power consumption	APPROX 30W	
Analog input channel	4ch(load , length , height , wind speed)	- Ensuring reliability used micom
Analog output channel	2ch(weight 4~20mA)	- SIMPLE KEY BOARD SET
Controller relay out	8ch (over load & rated weight signal)	- 4 ~ 20mA for external INTERFACE(OPTION)
Humidity of the environment in use	less than 95% RH	- Wind speed sensors and can be connected(OPTION)
Usage temperature range	-20°C ~ +70°C	- Hook height can be detected(OPTION)
Display signal	RS-232 serial (5" color touch lcd)	- DATA LOGGING SYSTEM (OPTION)
System accuracy	±3~5%	
Extension mode	communication RS-232 , RS422	
Material	SS40	

SH-1000T-L



DIVISION	CONTROLLER	
Model	SH-1000T-L (L-TYPE)	
Power supply	AC 110/220V ± 10% (SELECTOR), 50/60Hz 1Ph	
Power consumption	APPROX 30W	
Analog input channel	4ch(load , angle , height , wind speed)	- Ensuring reliability used micom
Analog output channel	2ch(weight 4~20mA)	- SIMPLE KEY BOARD SET
Controller relay out	8ch (over load & rated weight signal)	- 4 ~ 20mA for external INTERFACE(OPTION)
Humidity of the environment in use	less than 95% RH	- Wind speed sensors and can be connected(OPTION)
Usage temperature range	-20°C ~ +70°C	- Hook height can be detected(OPTION)
Display signal	RS-232 serial (7" color touch lcd)	- DATA LOGGING SYSTEM (OPTION)
System accuracy	±3~5%	
Extension mode	communication RS-232 , RS422	
Material	SS40	

DETECTOR

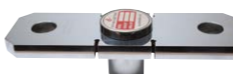


LENGTH DETECTOR

LOAD CELL



SPE series



TPC series



SSCK series

OPTION



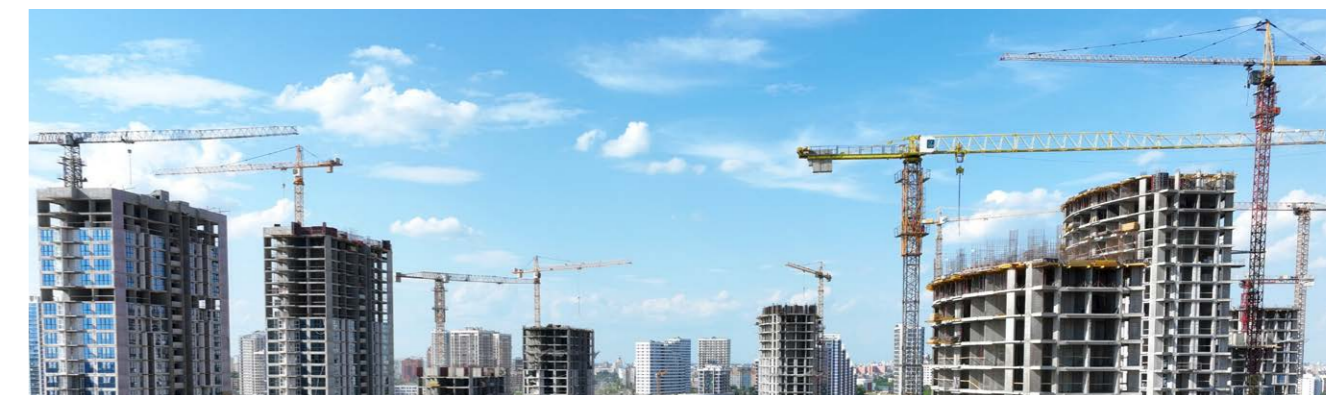
WINDSPEED SENSOR

It is proven to be automatically controlled to precise measurements even at high working environment safe and fine parts

Crane nature, MOMENT of crane center is change, due to the position of the every working TROLLEY changes. In this case, ignore the changes to MOMENT, driver can also reach a very dangerous situation when driver work at the discretion of the driver. Tower crane system dedicated overload (SH-1000T) protection device will detect the actual load of the tension wire rope using strain gage type load cell. And a system for using the Potentio-Meter detects the position of the trolley according to the rotation of the trolley drum. The principal of this system is the digital display of the location detected by the potentio-meter the position of the trolley to the user using the A/D converter. This DATA is a limit load and appear as compared to the data stored in the MICOM, which are compared to the actual load data received from the load cell, the load limit is a safety device that stops working when the warnings and crane reach. Using a MICRO PROCESSOR ensuring high reliability, it can secure more efficient work as Occupational Safety Authority products pass.

Features

- The correct load is detected by using the strain gage type load cell.
 - The correct location of trolley is detected by using the high accuracy potentiometer.
 - Filtering function for protecting crane's shaking (The moment malfunction' protection device).
 - Microprocessor & Watchdog Timer are built-in.
 - Additional option function by an order of user (wind speed, hook height etc.)
 - Site setting by easy operation.
- DISPALY (※SEGMENT LCD mode, GRAPHIC LCD mode)
 - Displays the current load (0.1 Ton unit)
 - Display trolley according to the distance limit load (0.1 Ton unit)
 - Displays the current working radius (0.1M unit)
 - HOOK height display (OPTION. 0.1M unit)
 - OPTION
 - Wind speed indication.
 - Hook height indication
 - Various relay output / Analog output depends on a customer's specification.
 - DATA LOGGING SYSTEM



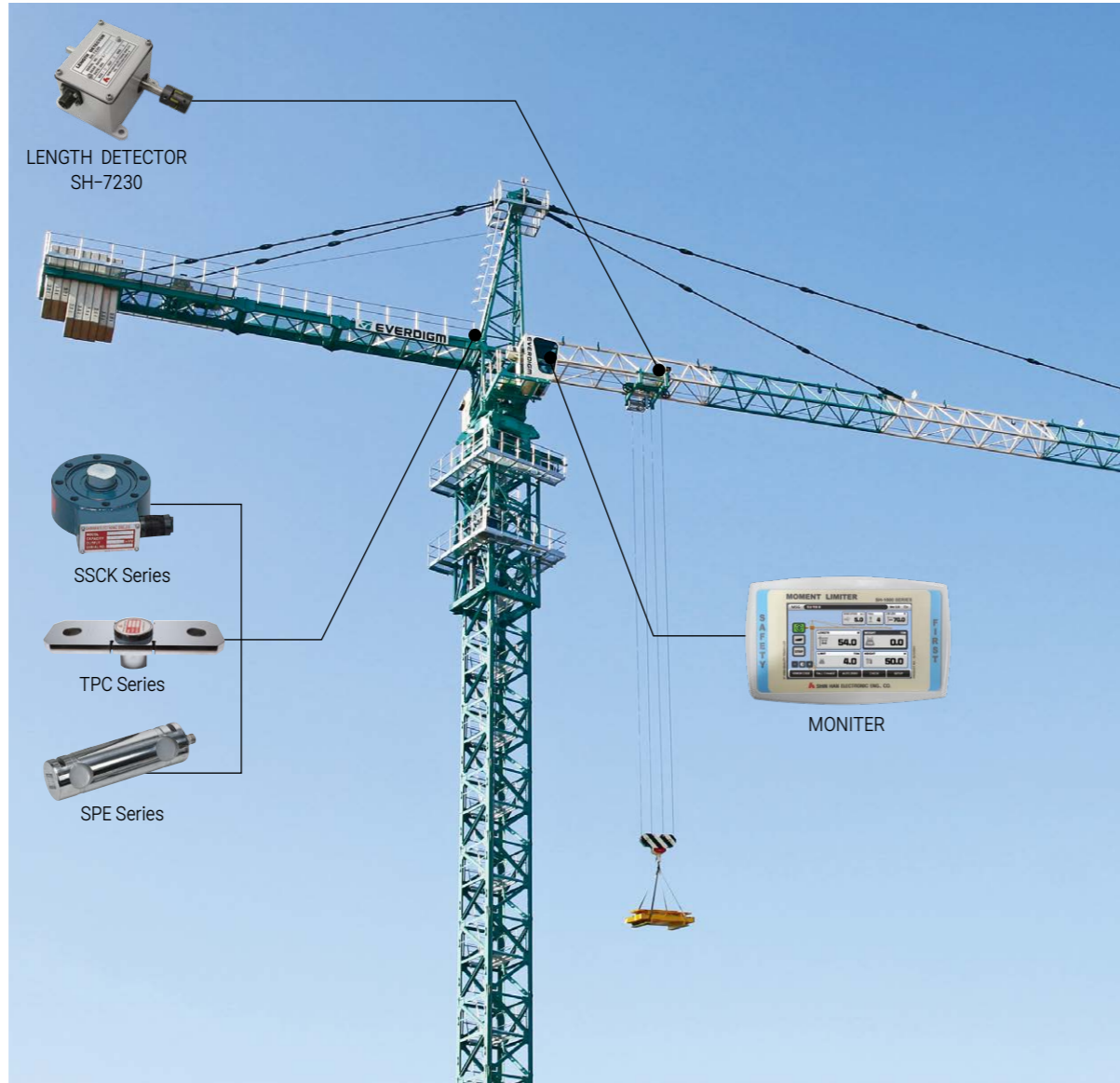
AML SH-1000T-T



AML for TOWER CRANE

Form Model	SH-1000T-T(COMPRESSION)	Volume Rating	J-1	Certification numbers	21-AV2BJ-0020
	SH-1000T-T(PIN)		J-1		21-AV2BJ-0021
	SH-1000T-T(TENSION)		J-1		21-AV2BJ-0022

The correct load detect will create a more convenient and fast working environment for the operator.



Option



WINDSPEED SENSOR

LCD COLOR TOUCH SCREEN

SEGMENT TYPE 8 Selection depends on the preference of the user.

STRAIN GAGE

PRESSURE GAGE

FILTERING

MICRO PROCESSOR

WATCHDOG TIMER

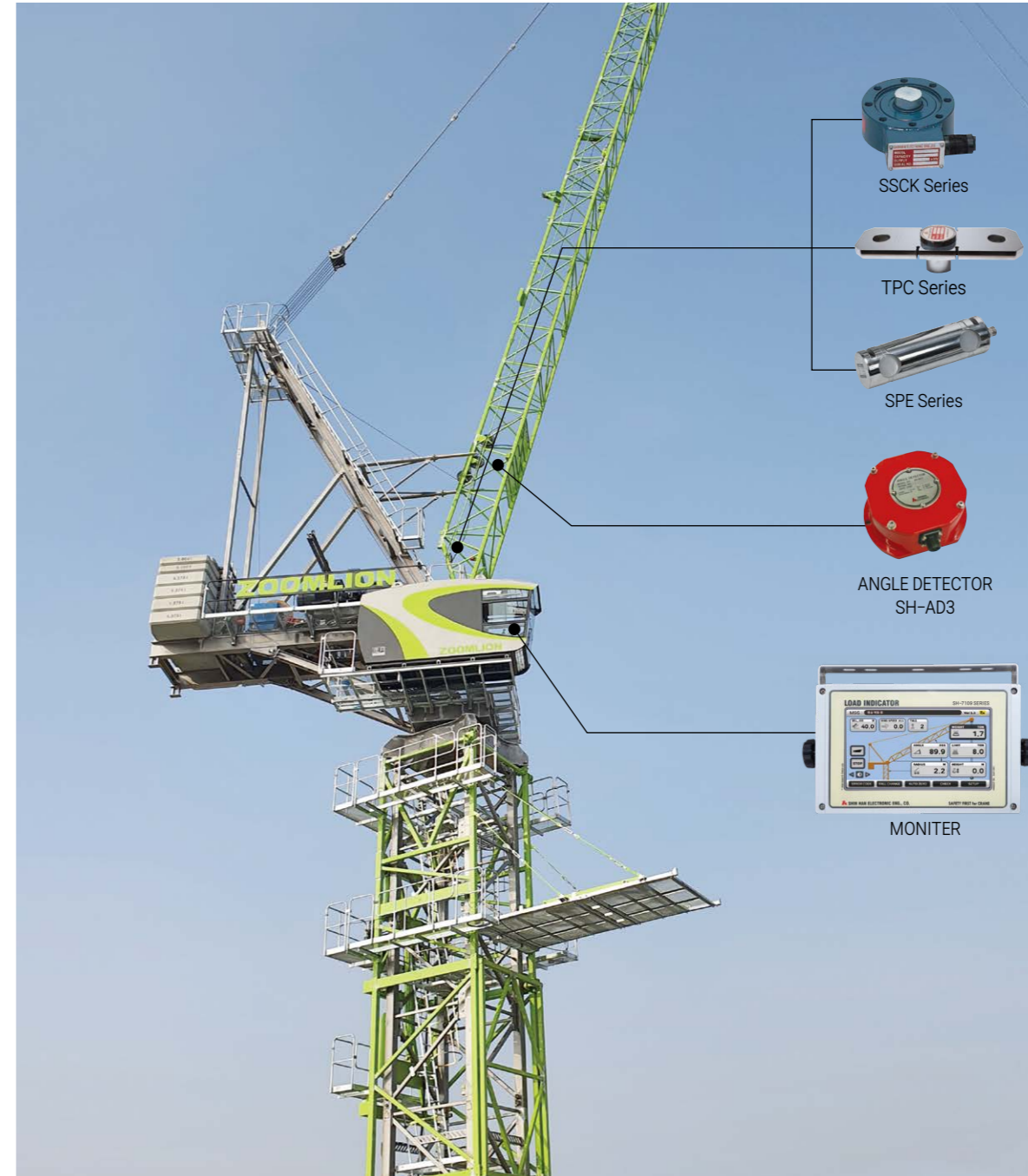
DATA LOGGING

AML SH-1000T-L



AML for LUFFING TOWER CRANE

Form Model	SH-1000T-L(COMPRESSION)	Volume Rating	J-1	Certification numbers	21-AV2BJ-0023
	SH-1000T-L(PIN)		J-1		21-AV2BJ-0024
	SH-1000T-L(TENSION)		J-1		21-AV2BJ-0025



LCD COLOR TOUCH SCREEN

SEGMENT TYPE 8 Selection depends on the preference of the user.

STRAIN GAGE

FILTERING

MICRO PROCESSOR

WATCHDOG TIMER

DATA LOGGING

SH-TPZ100



Compact wireless remote monitoring system for tower cranes



- Numerical display of crane information (current load, limit load, working radius, etc.) applied with high-resolution 2.4" LCD
- When the overload rate reaches 95%, a buzzer sound, alarm display, and vibration function that can be checked by the operator are applied
- Two-way wireless communication design that can control overload regulation operation without overload condition through operation button
- Designed to allow communication in open spaces without versatility and frequency interference
- Molding work and electromagnetic suitability certification (KC certification)
- Normal USB "C" charging type

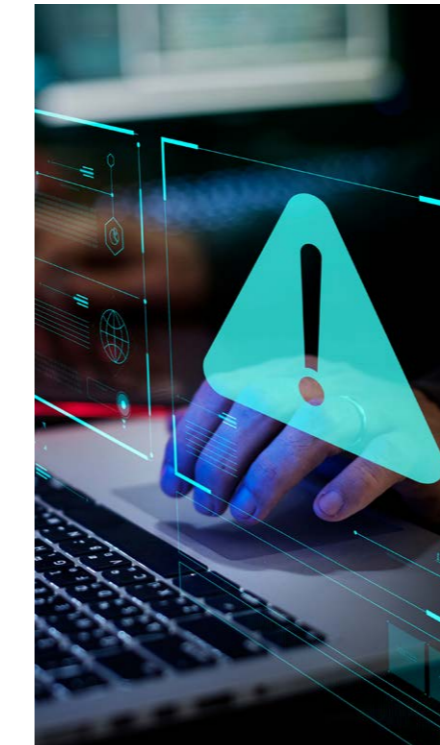
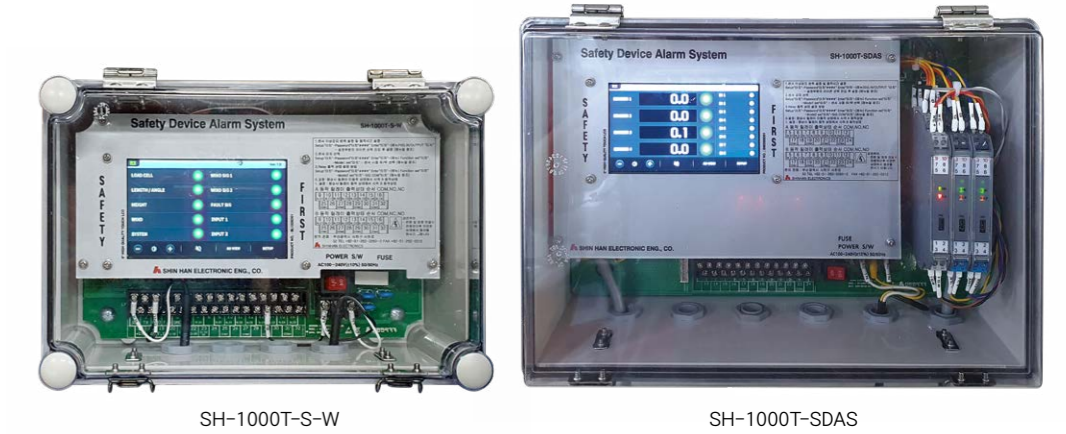
Division	TRANSMITTER	CONTROLLER
Model	X-LINK (Wireless Date Transmitter XTR24)	SH-TPZ100
Power supply	DC24V ± 10%	Lithium Polymer Battery 3.7V
Power consumption	APPROX 1.5W	APPROX 6.6Wh
Humidity of the environment in use	less than 95% RH	less than 95% RH
Usage temperature range	-20°C ~ +70°C	-20°C ~ +70°C
Radio frequency	2.4GHz	2.4GHz
Communication interface	CAN , RS-422 , RS232	-
Display signal	-	2.4" color touch LCD
Registration No.	R-R-S2H-X-LINK_SH-TPZ	R-R-S2H-X-LINK_SH-TPZ
Material	ABS	ABS

SH-1000T-S-W, SH-1000T-SDAS

Safety device error alarm system

SH-1000T-S-W (Safety device error alarm system) is a system that outputs a warning signal when an OVER LOAD LIMITER (safety device) malfunctions during tower crane operation.

When the data (weight, distance/angle, height, wind speed) of the RS-232 or RS485 communication signal is received from the OVER LOAD LIMITER (SH-1000T SERIES) and applied to the system setting function, the FAULT RELAY output is activated.



SH-1000T-SDAS detects abnormal output of equipment in operation by bridging the output signal of signal converter module of tower crane equipment. And it is a device that receives an input from an external Dry contact and outputs an abnormality warning signal when the internal set condition is reached.

It is a function that receives an analog signal from a signal converter and operates a divider in the abnormal warning device to receive input signals for abnormal conditions such as sensor failure/absence and external input (PLC) contact signals, and operate when the internal setting conditions are reached.

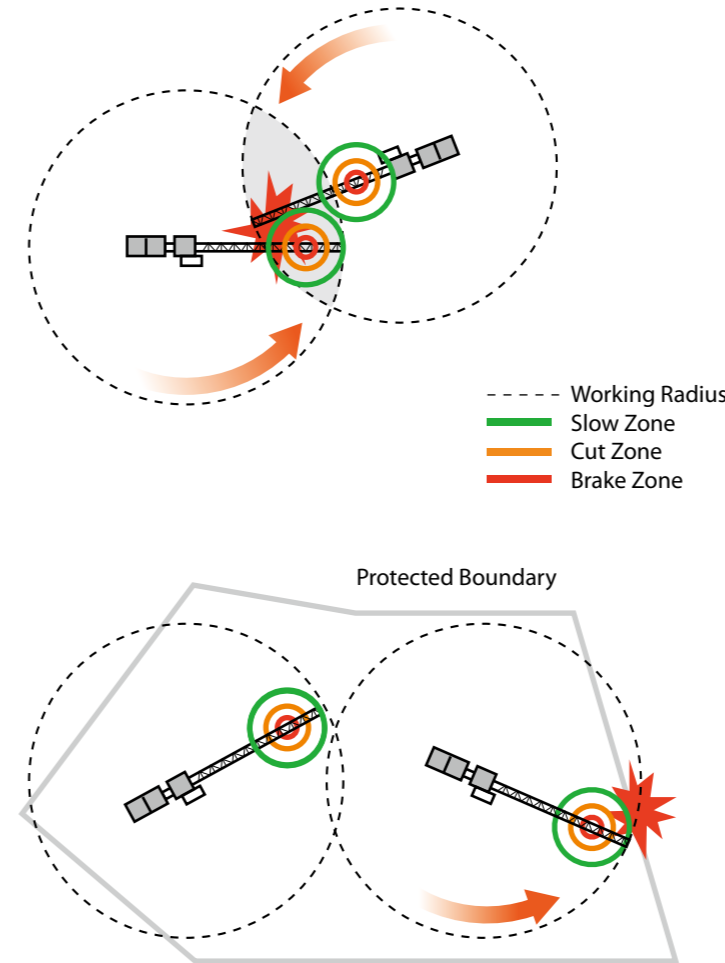
DIVISION	CONTROLLER	CONTROLLER
Model	SH-1000T-S-W	SH-1000T-SDAS
Power supply	AC 100-240V~(± 10%) 50/60Hz 1Ph Free voltage	AC 100-240V~(± 10%) 50/60Hz 1Ph Free voltage
Power consumption	APPROX 30W	APPROX 60W
Analog input channel	-	4ch(load , angle , height , wind speed)
Controller relay out	4ch (wind1,2 fault1,2)	4ch (wind1,2 fault1,2)
Humidity of the environment in use	less than 95% RH	less than 95% RH
Usage temperature range	-10°C ~ +60°C	-10°C ~ +60°C
Display signal	RS-232 serial (5" color touch lcd)	RS-232 serial (5" color touch lcd)
Extension mode	Communication RS-232 , RS422	Communication RS-232 , RS422
Analog signal isolation distributor	-	Voltage 2ch , Current 1ch
Material	ABS	ABS



AUTO MOMENT LIMITER

Only for the use of tower crane, Overload protection device, Anti-collision System

SH-3500 series



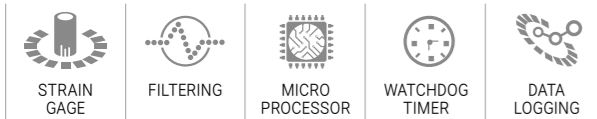
Equipped complex features cutting-edge safety device patented superior safety and convenience.

The device is overload protection due to tower crane load function exceeding, MOMENT by examining the change in TROLLEY's position or angle of the JIB, MOMENT overload protection function that allows driver to work within the limit load, function by controlling the height of the turning angle to prevent the crane collision with HOOK and a safety device with multiple functions for detecting the wind speed. In addition, high-tech safety devices, including DATA LOGGING SYSTEM also save work in analyzing the utilization of cranes and a number of overload.

Characteristic

- It is managed as a collision avoidance group, and crane information in the relevant area is displayed centered on the operator.
- MICRO PROCESSOR 및 WATCHDOG 내장 : Built-in MICRO PROCESSOR and WATCHDOG
- Field setting by easy handle
- Separate management through double password application (operator and administrator)
- Setting of work prohibited area and work record (Data Logging)

DIVISION	CONTROLLER	MONITOR
Model	SH-3500ACT	SH-3500M (Panel PC)
Power supply	AC100-240 VAC Free Voltage $\pm 10\%$	DC12V $\pm 10\%$
Power consumption	APPROX 60W	APPROX 30W
Analog input channel	4ch(load , length , height , wind speed)	-
Controller relay out	16ch (hoist 2ch) , (trolley 4ch) , (slewing 4ch) , (over load & signal 6ch)	-
Humidity of the environment in use	less than 95% RH	less than 95% RH
Usage temperature range	-20°C ~ +60°C	-20°C ~ +60°C
Display signal	RS-232 serial inside 7" color touch monitor (A.M.L setting)	RS-232 serial 10.4" (Anti-collision setting)
System accuracy	$\pm 3\sim 5\%$	-
Material	SS40	SS40



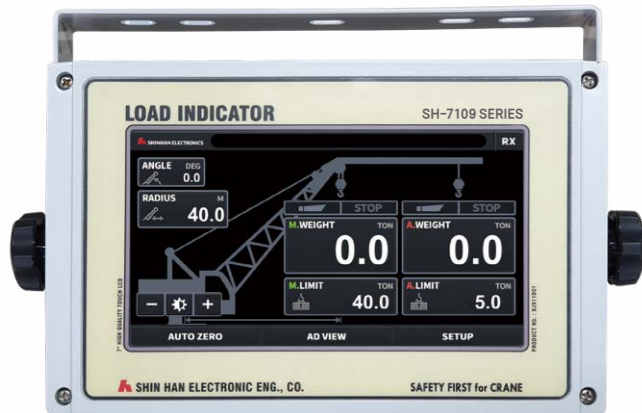
AMI JIB CRANE



Overload protection device for JIB CRANE SH-7109 Series

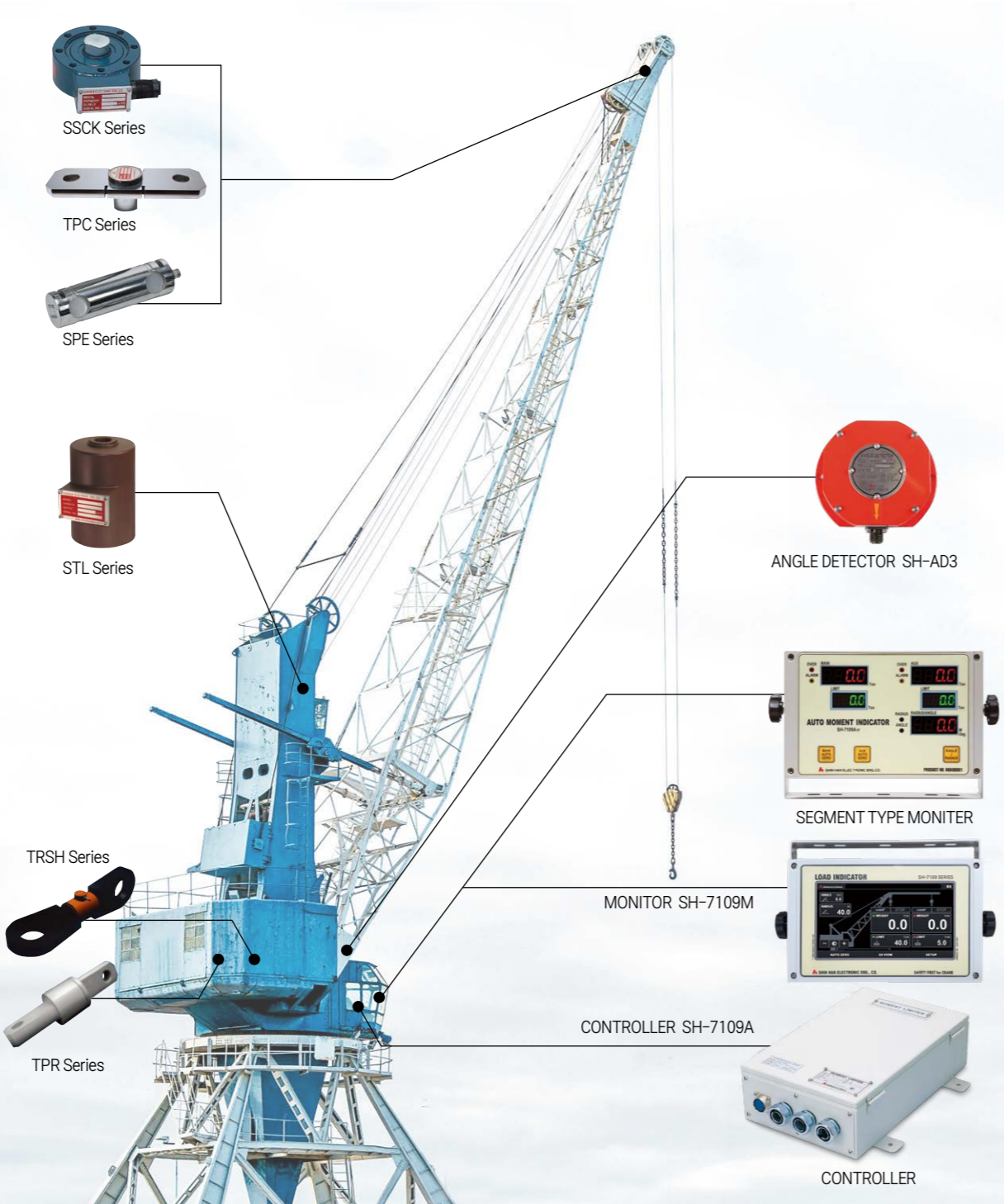
Form Model	SH-7109A(C)	Volume Rating	J-1	Certification numbers	21-AV2BJ-0017
	SH-7109A(P)		J-1		21-AV2BJ-0018
	SH-7109A(T)		J-1		21-AV2BJ-0019

The safety load moment limiter with easy exact control in which actual load and limited load, boom's angle and working radius are displayed simultaneously.



Selection depends on the preference of the user.

LCD COLOR TOUCH SCREEN	GRAPHIC LCD TYPE	SEGMENT TYPE
STRAIN GAGE	FILTERING	MICRO PROCESSOR
WATCHDOG TIMER	DATA LOGGING	



Current load and load limit, The angle of the boom, The working radius is displayed at the same time is easy to correct safety device control.

SH-7109A is a jib crane, floating crane overload protection device only. The angle of the change of the crane boom to the limit load by using the calculated POTENTIO-METER, Use the STRAIN GAGE TYPE LOAD CELL calculate the load current. Calculation been compared to the current load and load limit control the operation of the crane overload. Use the monitor, by showing the load current, the limits of the load angle, working radius of the boom in digital is a safety device which allows the operator to work more safely.

Features

- The correct load is detected by using the strain gage type load cell.
- The correct location of trolley is detected by using the high accuracy potentiometer.
- DISPLAY
 - Displays the current load(0.1 Ton unit)
 - Displays the current working radius(0.1M unit)
 - Display of boom angle(0.1° unit)
 - Displayed according to the operation radius limit load calculation for the angle of the boom(0.1 Ton unit)
- Filtering function for protecting crane's shaking (The moment malfunction protection device).
- Microprocessor & Watchdog Timer are built-in.
- Additional option function by an order of user (wind speed, hook height etc.)
- Site setting by easy operation.



Form Model	SH-7109A	Volume Rating	J-1	Certification numbers	09-AV2BJ-0017
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DIVISION	CONTROLLER	MONITOR		FEATURES
		7 SEGMENT FND TYPE	TOUCH LCD TYPE	
MODEL No.	SH-7109A	-	-	- It is reliability recovery by MICOM use - Easy KEY BOARD SET - The various outputs for external INTERFACE, OPTION support (an ANALOGUE output, a serial communication, addition point of contact, etc.)
POWER SUPPLY	110/220Vac ± 10% 50/60Hz 1Ph	DC +12V	DC +12V	
WORKING TEMPERATURE RANGE	-20°C ~ 60°C	-	-	
RELATIVE HUMIDITY	95%RH	-	-	
DISPLAY	-	MAIN, AUX WEIGHT : 4 DIGIT MAIN, AUX LIMIT : 4 DIGIT RADIUS/ANGLE : 4 DIGIT	-	
SIGNAL OUTPUT	MAIN ALARM, OVER, SIG1, SIG2 AUX ALARM, OVER, SIG1, SIG2	MAIN ALARM, OVER LAMP AUX ALARM, OVER LAMP RADIUS/ANGLE LAMP	-	
SYSTEM ACCURACY	± 5%(It changes with system specifications)	-	-	
SIZE	300(W)X400(H)X115(D)	220(W)X140(H)X75(D)	-	

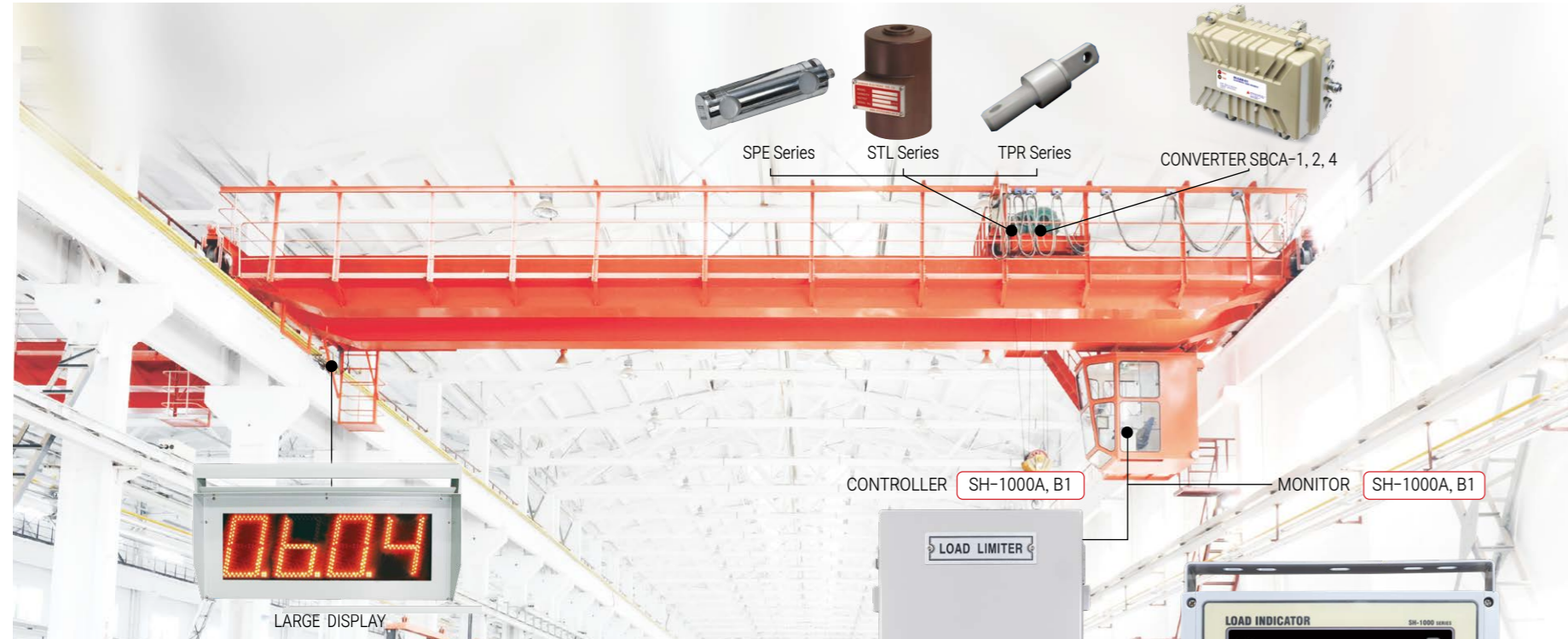
※ Dimensions and specifications can be changed without prior notice to improve performance.

LOAD LIMITER SYSTEM

OVER LOAD LIMITER for overhead cranes, gantry cranes, and hoist cranes SH-1000A, B1



Form Model	SH-1000A(C), SH-1000B1(C)	Volume Rating	J-1	Certification numbers	21-AV2BJ-0042/45
	SH-1000A(P), SH-1000B1(P)		J-1		21-AV2BJ-0043/46
	SH-1000A(T), SH-1000B1(T)		J-1		21-AV2BJ-0044/47



Selection depends on the preference of the user.



SH-1000A, B1 LOAD LIMITER SYSTEM is an overload limiter device for overhead cranes, gantry cranes, and hoist cranes. It detects the exact load using the strain gauge type load cell and outputs an alarm and cut-off contact point in case of overload. It is a LOAD LIMITER SYSTEM that can output analog output (0~10V/4~20mA) and RS-485/RS-232C for external interface.

Division	Controller		MONITOR			Feature
			SH-1000A 7 SEGMENT FND	SH-1000B1 7 SEGMENT FND	TOUCH LCD TYPE	
Model	SH-1000A	SH-1000B1				
HOOK	1	2				
LOAD CELL	1 ~ 4	2 ~ 8				
Display			WEIGHT : 4 DIGIT	TOTAL : 4 DIGIT MAIN : 3 DIGIT AUX : 3 DIGIT	TOTAL : 4 DIGIT MAIN : 4 DIGIT AUX : 4 DIGIT	
Output signal	ALARM, OVER, SIG1, SIG2	TOAL OVER MAIN ALARM, OVER, SIG1, SIG2 AUX ALARM, OVER, SIG COMMON ALARM	ALARM, OVER LAMP	TOTAL, MAIN, AUX OVER LAMP	TOTAL, MAIN, AUX ALARM, OVER LAMP	Number of crane hooks, number of weight sensing sensors, and output contacts according to load (weight value can be set)
Contact capacity	DRY CONTACT 250VAC 3A					
Power supply voltage	110/220Vac ± 10%, 50/60Hz 1Ph	-	DC +5V	-	DC +12V	
Power consumption	APPROX 40W	-				
Operating temperature	-20°C ~ 60°C	-				
Humidity	95%RH	-				
System extent	± 1 ~ 5%(Depends on system configuration and specifications)					
Size	250(W)×400(H)×115(D)		145(W)X145(H)X67(D)		220(W)X140(H)X75(D)	

※ Dimensions and specifications can be changed without prior notice to improve performance.

LWS LOAD WEIGHING SYSTEM

LWS for container crane, unloader crane SH-1000B1-C2, C4



SH-1000B1-C SERIES LOAD WEIGHING SYSTEM is an over load limiter device for container cranes and unloader cranes. It is a device that detects the exact current load using STRAIN GAGE TYPE LOAD CELL and outputs an alarm and cut-off contact point in case of overload. It displays the right load and left load of the container crane spreader and the total load display together. It consists of various contact points such as cut off the eccentric load between the right and left loads, cut off the ROPE SLACK, and cut off the combined load. Also, It is a LOAD WEIGHING SYSTEM that ANALOG output (0~10V/4~20mA) and RS-485/RS-232C output for external interface are available.

Characteristic

- Accurate load detection and display using STRAIN GAGE TYPE LOAD CELL
- Container crane / UNLOADER crane
- TOTAL load display (0.1 Ton unit, 4 DIGIT)
- SIDE A load display (0.1 Ton unit, 3 DIGIT)
- SIDE B load display (0.1 Ton unit, 3 DIGIT)
- On-site setting possible by simple operation
- Filtering function in preparation for crane shaking (momentary malfunction prevention function)
- Built-in MICRO PROCESSOR and WATCHDOG TIMER
- OPTION can be added by user's order
- Option
- ANALOG OUTPUT 0~10V / 4~20mA
- SERIAL OUTPUT RS-232C / RS-485

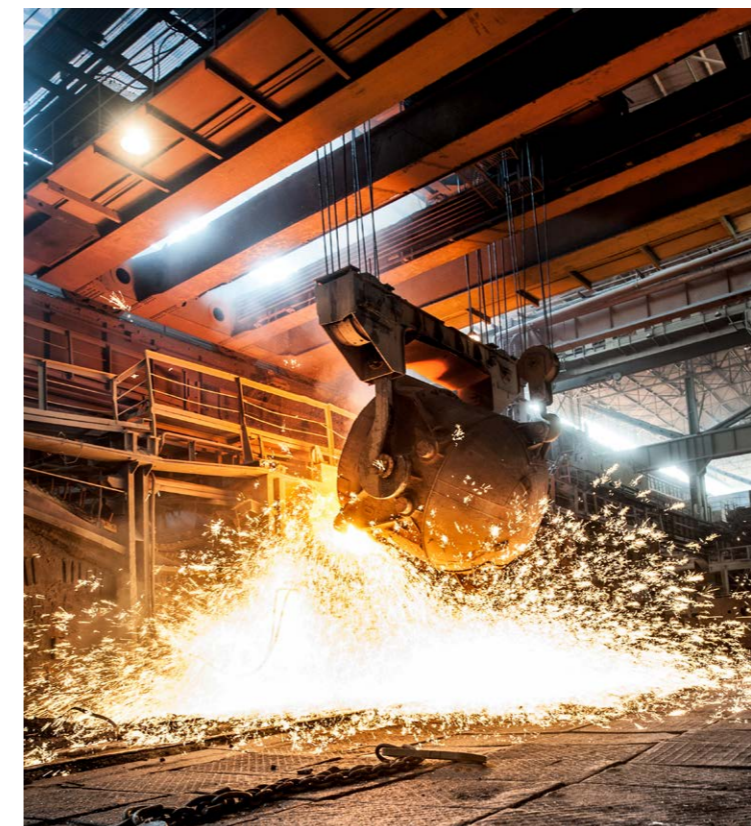


Division	CONTROLLER		MONITOR			Feature
	SH-1000B1-C2	SH-1000B1-C4	SH-1000B1-C2 7 SEGMENT FND	SH-1000B1-C2 TOUCH LCD	SH-1000B1-C4 TOUCH LCD	
Model	SH-1000B1-C2	SH-1000B1-C4				
HOOK	2	4				
LOAD CELL	2 ~ 4	4 ~ 8				
Display			TOTAL : 4 DIGIT A : 3 DIGIT B : 3 DIGIT	TOTAL : 4 DIGIT A : 4 DIGIT B : 4 DIGIT	TOTAL : 4 DIGIT A : 4 DIGIT B : 4 DIGIT C : 4 DIGIT D : 4 DIGIT	Number of crane hooks, number of weight sensing sensors, and output contacts according to load (weight value can be set)
Output signal	SIDE A, B SNAG TOTAL SLACK, ALARM, OVER A-B LOAD FAULT	A, B, C, D SNAG TOTAL SLACK, ALARM, OVER A-B LOAD FAULT	TOTAL, A, B OVER LAMP	TOTAL, A, B ALARM, OVER LAMP	TOTAL, A, B, C, D ALARM, OVER LAMP	
Contact capacity	DRY CONTACT 250VAC 3A	-				
Power supply voltage	110/220Vac ± 10%, 50/60Hz 1Ph	-	DC +5V	DC +12V	-	
Power consumption	APPROX 40W	-				
Operating temperatur	-20°C ~ 60°C	-				
Humidity	95%RH	-				
System extent	± 1~5%(Depends on system configuration and specifications)					
Size	250(W)X400(H)X115(D)		145(W)X145(H)X67(D)		220(W)X140(H)X75(D)	

※ Depends on system configuration and specifications

SH-1000BN3W

LWS for steel crane



Form Model	SH-1000BN3W(C)	Volume Rating	J-1	Certification numbers	22-AV2BJ-0022
	SH-1000BN3W(P)		J-1		22-AV2BJ-0023
	SH-1000BN3W(T)		J-1		22-AV2BJ-0024

SH-1000BN3W LOAD WEIGHING SYSTEM is an over load limiter device for container cranes and unloader cranes. It is a device that detects the exact current load using STRAIN GAGE TYPE LOAD CELL and outputs an alarm and cut-off contact point in case of overload. Detects the hook height using the encoder in the main hook and displays it along with the load. Also, It is a LOAD WEIGHING SYSTEM that RS-485/RS-232C output for external interface are available.

Characteristic

- Accurate load detection and display using STRAIN GAGE TYPE LOAD CELL
- Ceiling crane/gentry crane/hoist crane, etc
- TOTAL load display (0.1 Ton unit, 4 DIGIT)
- HOIST1 load display (0.1 Ton unit, 3 DIGIT)
- HOIST2 load display (0.1 Ton unit, 4 DIGIT)
- HOIST1-2 load display (0.1 Ton unit, 4 DIGIT)
- NET load display (0.1 Ton unit, 4 DIGIT)
- HOOK Height display (0.01m unit, 4 DIGIT)
- On-site setting possible by simple operation
- Filtering function in preparation for crane shaking (momentary malfunction prevention function)
- Built-in MICRO PROCESSOR and WATCHDOG TIMER
- OPTION can be added by user's order
- Option
- SERIAL OUTPUT RS-232C / RS-485

Division	Controller	MONITOR	Feature
		TOUCH LCD TYPE	
Model	SH-1000BN3W		
HOOK	2		
LOAD CELL	2 ~ 8		
Display		TOTAL / HOIST1/ HOIST2 / HOIST1-2 NET WEIGHT / HOOK HEIGHT : 4 DIGIT	Number of crane hooks, number of weight sensing sensors, and output contacts according to load (weight value can be set)
Output signal	TOTAL, HOIST1, HOIST2, HOIST1-2 OVER COMMON ALARM	TOTAL, HOIST1, HOIST2, HOIST1-2 OVER LAMP COMMON ALARM LAMP	
Contact capacity	DRY CONTACT 250VAC 3A		
Power supply voltage	110/220Vac ± 10%, 50/60Hz 1Ph	DC +12V	
Power consumption	APPROX 40W		
Operating temperature	-20°C ~ 60°C		
Humidity	95%RH		
System extent	± 1 ~ 5%(Depends on system configuration and specifications)		
Size	250(W)X400(H)X115(D)	145(W)X145(H)X67(D)	

※ Depends on system configuration and specifications

GANTRY CRANE



Form Model	SH-1000B1-N3(C), SH-1000B1-N4(C)	Volume Rating	J-1	Certification numbers	22-AV2BJ-0001/0004
	SH-1000B1-N3(P), SH-1000B1-N4(P)		J-1		22-AV2BJ-0002/0005
	SH-1000B1-N3(T), SH-1000B1-N4(T)		J-1		22-AV2BJ-0003/0006

LWS for Gantry crane SH-1000B1-N3/N4



SH-1000B1-N SERIES LOAD LIMITER SYSTEM is an overload limiter device for overhead cranes, gantry cranes, and hoist cranes. It detects the exact load using the strain gauge type load cell and outputs an alarm and cut-off contact point in case of overload. It is a LOAD LIMITER SYSTEM that can output analog output (0~10V/4~20mA) and RS-485/RS-232C for external interface.

Selection depends on the preference of the user.



Division	Controller	MONITOR			Feature
		SH-1000B1-N3 7 SEGMENT FND	SH-1000B1-N4 7 SEGMENT FND	SH-1000B1-N3, N4 TOUCH LCD	
Model	SH-1000B1-N3	SH-1000B1-N4			
HOOK	3	4			
LOAD CELL	3~6	4~8			
Display			TOTAL, MAIN1, MAIN2 AUX, M1-M2, M1+M2 : 4 DIGIT	TOTAL, MAIN1, MAIN2, MAIN3, AUX, M1- M2, M1+M2, M1+M2+M3 : 4 DIGIT	TOTAL, MAIN1, MAIN2, (MAIN3), AUX, M1- M2, M1+M2, (M1+M2+M3) : 4 DIGIT
Output signal	TOTAL : ALARM, OVER MAIN1, 2, AUX : SIG, ALARM, OVER M1-M2, M1+M2 : ALARM, OVER	TOTAL, MAIN1, MAIN2, MAIN3 AUX, M1-M2, M1+M2, M1+M2+M3 : ALARM, OVER	COMMON ALARM, OVER LAMP	COMMON ALARM, OVER LAMP	TOTAL, MAIN1, MAIN2, (MAIN3), AUX, M1-M2, M1+M2(M1+M2+M3) : ALARM, OVER LAMP
Contact capacity	DRY CONTACT 250VAC 3A	-			
Power supply voltage	110/220Vac ± 10%, 50/60Hz 1Ph	-	DC +5V	-	DC +12V
Power consumption	APPROX 80W	-			
Operating temperature	-20°C ~ 60°C	-			
Humidity	95%RH	-			
System extent	± 1 ~ 5%(Depends on system configuration and specifications)				
Size	400(W)X500(H)X117(D)		253(W)X193(H)X60(D)		220(W)X140(H)X75(D)

※ Depends on system configuration and specifications

LOAD LIMITER

For the use of sort of Hoist crane, Elevator, Hoisting overload protection device
LOAD LIMITER SH-1200



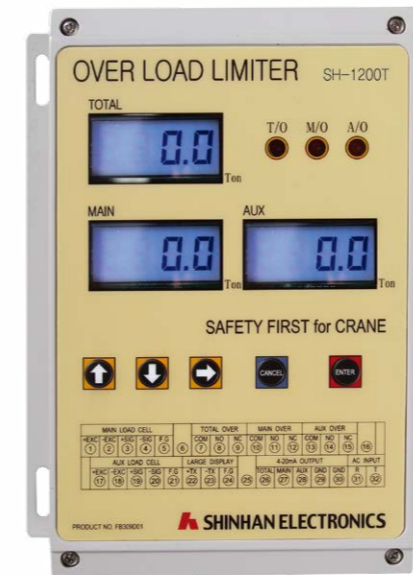
Form Model	SH-1200A(C), SH-1200B(C)	Volume Rating	J-1	Certification numbers	15-AV2BJ-0011
	SH-1200A(P), SH-1200B(P)		J-1		15-AV2BJ-0012
	SH-1200A(T), SH-1200B(T)		J-1		15-AV2BJ-0013

An overload of Hoisting crane is detected by strain gage type load cell and its safety is maintained by overload protection in high speed and high precision.



SH-1200 LOAD LIMITER is to detect an overload, such as a hoist crane or elevator, STRAIN GAGE type load cell (Electronic J-1 TYPE), A safety device to prevent human and material accidents in advance, coming from overloaded.

- Regardless of the start time, detecting the high-speed, high precision overload condition.
- Determination of the person working
 - No effect of the built-in circuitry to determine the instantaneous load fluctuation, etc.
- Improve accuracy of preventing malfunction and overload detection time
 - By employing a charge-discharge circuit according to the semiconductor device and the accuracy of the detection time
- It is easy to direct setting and calibration accuracy by detecting according to the current loading capacity without detection by electric
- It is easy to ensure the compatibility of parts or used parts, it was designed with ease of maintenance.



CONTROLLER 176(W)×220(H)×84.6(D)



SPE Series



SSCK Series



TPC Series

DIVISION	CONTROLLER	MONITOR	FEATURES
MODEL No.	SH-1200A SH-1200B	Built-in	MICOM used to obtain reliable Simple KEY BOARD SET Low-cost, high-performance
HOOK No.	1 2		
POWER SUPPLY	AC100~240V FREEVOLT 50~60Hz AC100~240V FREEVOLT 50~60Hz	DC+5V	
WORKING TEMPERATURE RANGE	-20°C ~ 60°C -20°C ~ 60°C		
RELATIVE HUMIDITY	95% RH 95% RH		
DISPLAY	WEIGHT : 4DIGIT	TOTAL: 4DIGIT MAIN : 4DIGIT AUX : 4DIGIT	
SIGNAL OUTPUT	ALARM OVER 1a1b(3A 250V)	TOTAL OVER MAIN OVER AUX OVER 1a1b(3A 250V)	POWER : GREEN ALARM : YELLOW OVER : RED
MATERIAL	SS41		
SYSTEM ACCURACY	±3 ~ 5% (It changes with system specifications)		

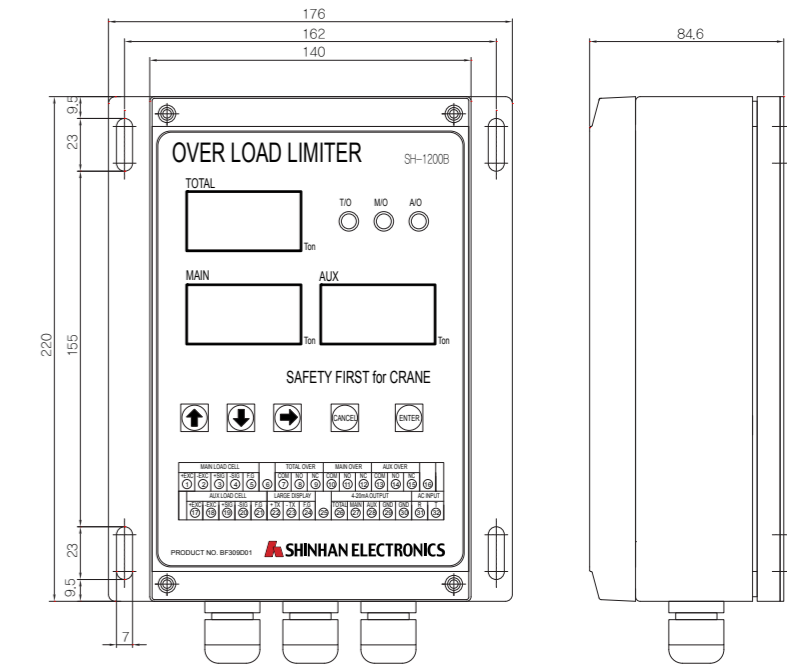
※ Dimensions and specifications can be changed without prior notice to improve performance.

SH-1200 series

- Rated input voltage : AC 100~240V FREEVOLT ± 10% 50~60Hz Setting possible.
- Load detection system : Weight detection system by strain gage type load cell.
- Loadcell Power Supply : DC10V ± 5%, Output Current : within 250mA.
350Ω LOAD CELL 8 system can be connected to Parallel

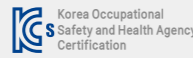
	SH-1200A	SH-1200B
Load Indication	4digit load weight	4digit Total load weight 4digit Main load weight 4digit Aux.load weight

- Control Output:
Total : Relay Contact Output 1a1b/Contact Capacity : 250VAC 3A
Main : Relay contact 1a1b (Option)/Contact Capacity : 250VAC
Aux : Relay Contact 1a1b (Option)/Contact Capacity : 250VAC
- Return System : Automatic Reset (At the time of arrival below the setting value)
- Over load detection time : within 0.2sec.
- Ambient temperature : -10°C ~ 70°C
- Ambient humidity : Below 95%RH



LOAD LIMITER

SH-750



CONTROLLER 197(W)×97(H)×71(D)



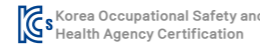
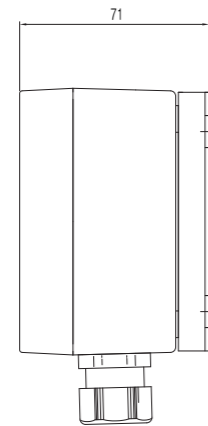
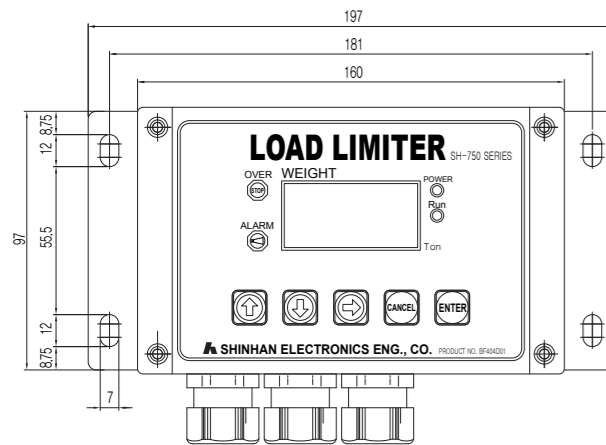
SPE Series



SSCK Series



TPC Series



Form Model	SH-750(Compression)	Volume Rating	J-1	Certification numbers	16-AV2BJ-0002
	SH-750(Pin)		J-1		16-AV2BJ-0003
	SH-750(Tension)		J-1		16-AV2BJ-0004

SH-750

- Rated input voltage : AC 100~240V FREEVOLT ± 10% 50~60Hz possible to choose the order specification.
- Load detection system : Weight detection system by strain gage type load cell.
- Load cell Power Supply : DC10V, ± 5%, Output Current : within 250mA
- Scope of Zero setting : 10turn potentiometer adjusting
- Scope of Gain setting : 2P DIP switch adjusting
- Accuracy/Non-Linearity : Within 0.2% of F.S (1024 A/D)
- Load Indication System : 4Digit 7Segment /LCD DISPLAY
- Control Output :
 - Low (Alarm)-Relay contact output 1a1b/ Contact Capacity 250VAC 5A
 - High (Over)-Relay contact Output 1a1b/ Contact Capacity 250VAC 3A
- Return System : Automatic Reset
- Overload detection time : Within 0.1sec
- Combined Accuracy : ± 0.2% of Rated Capacity
- Ambient Humidity : Below 95%RH

DIVISION	CONTROLLER	MONITOR
MODEL No.	SH-750	Built-in
HOOK No.	1	
POWER SUPPLY	AC100~240V FREEVOLT 50~60Hz	DC+5V
WORKING TEMPERATURE RANGE	-20°C ~ 60°C	
RELATIVE HUMIDITY	95% RH	
DISPLAY	WEIGHT : 4DIGIT	
SIGNAL OUTPUT	ALARM	RUN : GREEN
	OVER	ALARM : YELLOW
	1a1b(3A 250V)	OVER : RED
MATERIAL	SS41	
SYSTEM ACCURACY	±3~5% (It changes with system specifications)	

※ Dimensions and specifications can be changed without prior notice to improve performance.

LOAD LIMITER

SH-700



SH-700

- Rated input voltage : AC 100~240V FREEVOLT ± 10% 50~60Hz possible to choose the order specification.
- load detection system : Weight detection system by strain gage type load cell
- Load cell Power Supply : DC10V, ± 5%, Output Current : within 250mA
- Scope of Zero setting : 10turn potentiometer adjusting
- Scope of Gain setting : 2P DIP switch adjusting
- Accuracy/Non-Linearity : Within 0.2% of F.S (1024 A/D)
- Load Indication System : 4Digit 7Segment /LCD DISPLAY
- Control Output :
 - Low (Alarm)-Relay contact output 1a1b/ Contact Capacity 250VAC 5A
 - High (Over)-Relay contact Output 1a1b/ Contact Capacity 250VAC 3A
- Return System : Automatic Reset
- Overload detection time : Within 0.1sec
- Combined Accuracy : ± 0.2% of Rated Capacity
- Ambient Humidity : Below 95%RH

DIVISION	CONTROLLER	MONITOR
MODEL No.	SH-700	Built-in
HOOK No.	1	
POWER SUPPLY	AC100~240V FREEVOLT	DC+5V
WORKING TEMPERATURE RANGE	-20°C ~ 60°C	
RELATIVE HUMIDITY	95% RH	
DISPLAY	WEIGHT : 4DIGIT	
SIGNAL OUTPUT	ALARM	POWER : GREEN
	OVER	ALARM : YELLOW
	1a1b(3A 250V)	OVER : RED
MATERIAL	SS41	
SYSTEM ACCURACY	±3%~±5% (It changes with system specifications)	

※ Dimensions and specifications can be changed without prior notice to improve performance.



SPE Series



SSCK Series

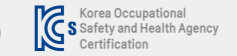


TPC Series

SAFELO

Only for the use of small capacity hoist lift and elevator at industrial factory & construction site

Overload Limiter ACL-05



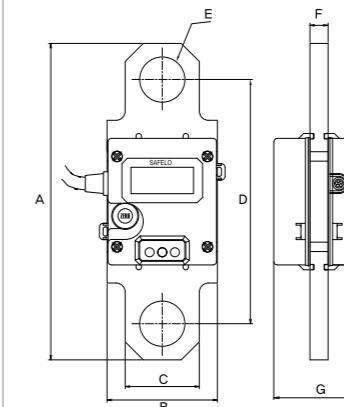
An over load safety device will be also installed easily and it can operate.

SAFELO is the equipment which detects an overload of a crane by the overload safety device only for hoist crane and prevents an accident. A load cell detects the weight that comes to lift by a hook by tension force of a wire rope, and SAFELO is the overload limiter which shows its load to LCD display panel. Load cell, controller and weight indication are one (1) unit through integrate type. So SAFELO remarkably is the special feature in order to connect with a hoist crane and use it easily.

The trouble such as low-accuracy of the electric type overload limiter of existence has been complemented, additionally its installation and maintenance are very easy and it is also developed so that the user has been satisfied.



OverLoad Limiter ACL-05



Specifications

- Rated capacity (R.C.) : 500kg~5T
- Safety Overload : 150% R.C.
- Ultimate Overload : 300% R.C.
- Supply Voltage : 85~265 VAC/VDC, 50/60Hz
- Operating temperature range : -20°C ~ +60°C
- Output contact : AC250V 3A / DC30V 3A
- Accuracy : within ± 3% ~ ± 5%
- Power : 0.87W

Features

- The correct load detection by the use of strain gage type load cell.
- Display : Actual load indication -10kg Unit (ACL-05~500KG:1KG Unit)
- Safety status by LED color : Green : Safety, Yellow : Alarm, Red : Stop
- Auto Zero Function
- Free Voltage of electric power
- Water proof(IP54)



Form Model	ACL-05-500kg	Volume Rating	J-1	Certification numbers	09-AV2BJ-0009
	ACL-05-1T		J-1		09-AV2BJ-0010
	ACL-05-3T		J-1		09-AV2BJ-0011
	ACL-05-5T		J-1		09-AV2BJ-0012

SAFELO Capacity Selection

The load capacity of SAFELO to be used is determined according to the wire rope part lines

SAFELO capacity = Rated load of a crane / wire rope part lines

MODEL	Load cell capacity
ACL-05-500kg	1T or less
ACL-05-1T	1T~1.6T
ACL-05-3T	1.6T~3.5T
ACL-05-5T	3.5T~5T

Dimensions(Load Cell + Controller)

MODEL	CAPACITY	DIMENSION(mm)							Weight(kg)
		A	B	C	D	E(φ)	F	G	
ACL-05-500kg	500kg or less	175	61	41	135	25	10	53	0.75
ACL-05-1T	1T or less	190	61	49	140	27	10	53	0.85
ACL-05-3T	3T or less	200	61	51	150	30	20	63	1.65
ACL-05-5T	5T or less	210	61	51	160	30	24	67	2.05

ANEMOMETER

Meteorological equipment to certified by Korea Meteorological Industry Promotion Agency
SH-610 series

It's possible to get correct weather material by an anemometer of the low price in highly functional equipment.



WIND SPEED SENSOR (SH-610S)



INDICATOR(SH-610MU) 140(W)×220(H)×84(D)
 ※ Shape and function can be changed

Features

- Ratio of low price vs. performance.
- Various output for outside interface and option support (analogue output, serial communication and additional contact point etc.)
- Three (3) stage contact point for setting of low / middle / high.

Specifications

- POWER SUPPLY : AC 100~240V ± 10%, 60Hz 1Ph
- POWER CONSUMPTION : APPROX 15W
- RELATIVE HUMIDITY : Less than 98% RH non-condensing
- WORKING TEMPERATURE RANGE : -20°C ~ 70°C
- DISPLAY : 3-DIGIT(m/s) 7-SEGMENT
- SCALE RANGE : 0 ~ 70.0 m/s
- SIGNAL OUTPUT - RELAY OUTPUT (5A, AC220V)
 LOW (Set enable) : 1a1b
 MIDDLE (Set enable) : 1a1b
 HIGH (Set enable) : 1a1b
- ANALOG OUTPUT - 4 ~ 20mA (OPTION)
- SIGNAL DISPLAY
 LOW : GREEN LED MIDDLE : YELLOW LED HIGH : RED LED



Meteorological equipment to certified by Korea Meteorological Industry Promotion Agency
SH-680MS series

ANEMOSCOPE & ANEMOMETER

This product detects wind speed & direction from the sensor and transmits a signal to the body. The transmitted signal (RS-422 communication signal or 4~20mA) is compared and processed by MICOM, and the wind speed and direction are displayed with a digital indicator. In addition, the value of m/s of wind speed is displayed on the 7" color Touch LCD, allowing the user to check the real-time wind speed, average wind speed, and maximum wind speed. The azimuth of the wind direction displays the communication signal value input from the sensor in real time with a digital indicator so that the user can easily identify it. According to the set value for wind speed, it outputs to 3 contacts of LOW, MID, HIGH relay, and outputs 4~20mA current corresponding to wind speed and direction. When installing the sensor, it should be installed in a place where there is no interference with the installation direction and the surrounding wind speed, and a communication cable is always recommended for the sensor cable.



WIND DIRECTION SPEED SENSOR(SH-680S)



ULTRASONIC SENSOR (SH-680UA-S)



INDICATOR(SH-680MS) 220(W)×140(H)×70(D)

Characteristic

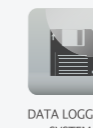
- Maximum wind speed (when HIGH signal is active) is recorded in the internal storage device.(maximum value condition) Max. 30 counts
- Function switching with jumpers without internal cable conversion even when field sensor specifications change
- Switch to socket type that can be replaced in case of chip burnout during communication input
- It is possible to check the sensor input status and has a touch configuration, so it is easy for users to access.
- User can set whether to use an external buzzer and turn off the sound for 10 minutes on the main screen
- Added filter circuit for sensor signal input analog circuit noise

Specification

- POWER SUPPLY: AC100~240 VAC Free Voltage ± 10%
- POWER CONSUMPTION: APPROX 60W
- Analog input channel: 2ch(wind speed, wind direction)
- Analog output channel: 2ch(wind speed, wind direction) 4~20mA, (inside jumper set) 0~10V
- Controller relay out : 3ch (LOW, MIDDLE, HIGH)
- Humidity of the environment in use: less than 95% RH
- Usage temperature range: -20°C ~ +70°C
- Display signal: RS-232 serial inside 7" color touch monitor
- Material: SS40



USB



DATA LOGGING SYSTEM

Using semi-permanent high-brightness LED/FND and It's possible to utilize for all SHINHAN Electronics's equipment.

Usage

- Manned, Unmanned CRANE, truck scale, various levels ranged table.

Features

- Using high-brightness red LED, recognition higher than FND.
- Using LED is life expectancy of semi-permanent.
- The expanded generality (Possible to utilize for all SHINHAN Electronics's equipment)



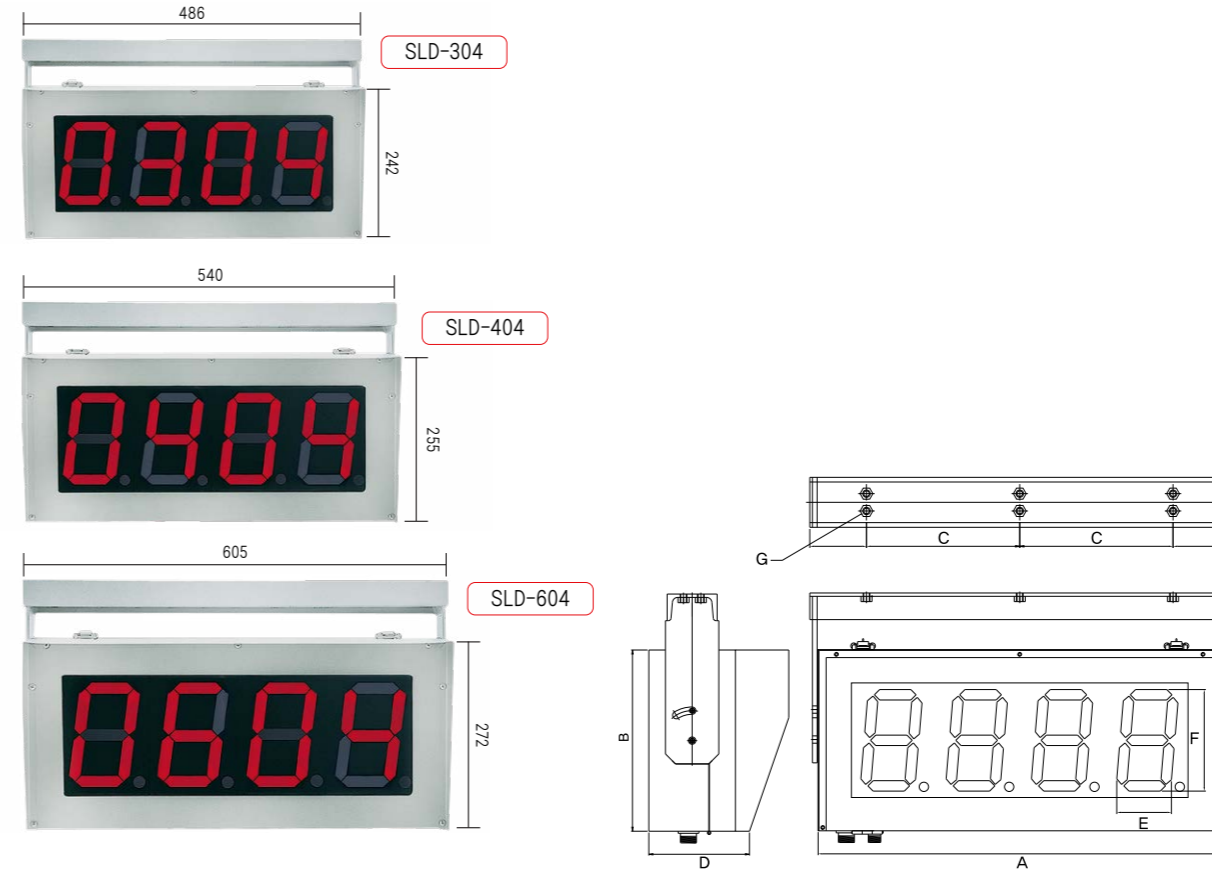
SLD-XVS (High-brightness LED type)

MODEL	A	B	C	D	E	F	G
SLD-60XVS	605	272	250	150	87.5	152.4	10
SLD-80XVS	786	335	-	128.5	117	200	-

SPECIFICATIONS

DIVISION	MODEL	SLD 604VS, SLD 605VS			SLD 804VS, SLD 805VS		
		3	4	5	3	4	5
Power		AC100~240V(FREE VOLT) ±10% 50/60Hz 1Ph					
Linr-of-sight		70M			90M		
Humidity		Less than 95% PH non-condensing					
Operating temperature		-10°C ~ 50°C					
Maximum display		999	9999	99999	999	9999	99999
Color		RED					
Character height		152.4mm			200mm		

LARGE DISPLAY FND TYPE



DIVISION

S	MAKER : SHINHAN
L	LARGE DISPLAY
D	30 : 3inch character height 40 : 4inch character height 60 : 6inch character height 80 : 8inch character height
O	3 : 3DIGIT 4 : 4DIGIT 5 : 5DIGIT
V	High-brightness LED TYPE

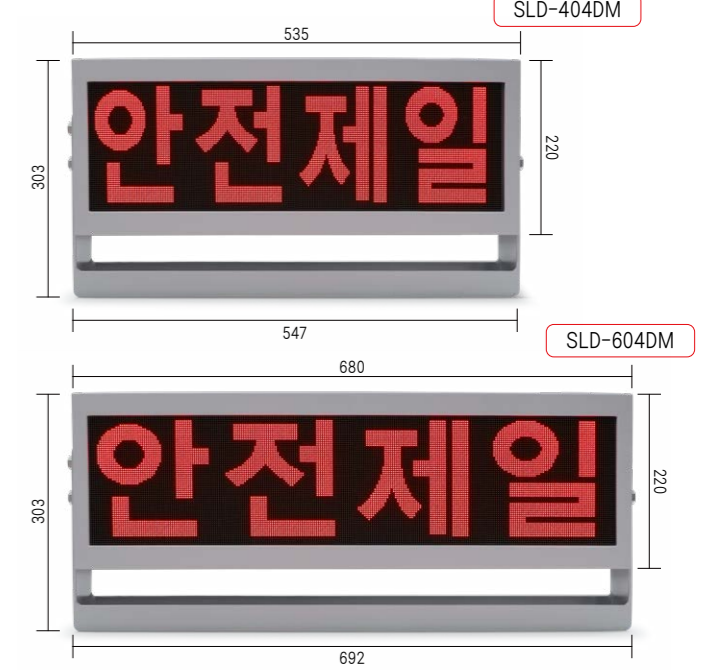
SLD-X (High-brightness FND type)

MODEL	A	B	C	D	E	F	G
SLD-304	486	242	170	130	53	76	10
SLD-404	540	255	217	150	60	102	10
SLD-604	605	272	250	150	87.5	152.4	10

SPECIFICATIONS

DIVISION	MODEL	SLD 30X			SLD 40X			SLD 60X			SLD 80X		
		3	4	5	3	4	5	3	4	5	3	4	5
Power		AC100~240V(FREE VOLT) ±10% 50/60Hz 1Ph											
Linr-of-sight		10M			20M			30M			50M		
Operating temperature		Less than 95% PH non-condensing											
Humidity		-10°C ~ 50°C											
Maximum display		999	999	999	999	999	999	999	999	999	999	999	999
Color		RED											
Character height		76mm			102mm			152.4mm			200mm		

LARGE DISPLAY DOT LED TYPE



Usage

- For manned/unmanned crane, weighbridge, and various long-distance numerical display

Characteristic

- Higher perceptibility than FND by using high-brightness color LED
- Using semi-permanent LED
- High versatility (can be attached to all equipment of our device)

SLD-X04DM(High-brightness DOT LED)

MODEL	A	B	C	D	E
SLD-404DM	535	220	91	303	547
SLD-604DM	680	220	91	303	692

SPECIFICATIONS

MODEL	SLD-40XDM		SLD-60XDM	
	4	5	4	5
DIGIT	4	5	4	5
Power	AC100~240V(FREE VOLT) ±10% 50/60Hz 1Ph			
Linr-of-sight	50M		70M	
Operating temperature	Less than 95% PH non-condensing			
Humidity	-10°C ~ 50°C			
Maximum display	9999	99999	9999	99999
Color	COLOR			
Character height	102mm	102mm	152mm	152mm

BTR24 WIRELESS REMOTE INDICATOR

The portable wireless remote indicator which is raised the value at tough site.

This equipment conveys data from load Cell to 2.4inch (320x240) high-brightness screen through wireless by a portable wireless remote indicator of 2.4GHZ, and indicates it by digital.

When difficult site and load cell often have a mechanical difficulty and shake, its work can be safety to install a cable from load Cell and an indicator receives data by wireless from a load cell.

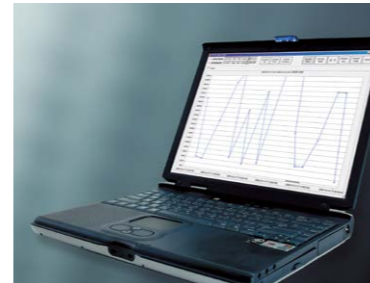
The function of indication of a load cell up to at most four (4) is possible by the additional function, and which is the individual adding up & average indication etc. Also using a PC, it's possible to preserve data from load cell through wireless remote area.

The perfect insulation from communication noise by 2.4GHz SPECTRUM RADIO MODULE use. By frequency band 2.4GHZ use, practicable without radio registration can be everywhere in the world.

- Wireless way : 2.4GHz Wireless Chip Antenna
- Supply voltage : 1.5V Alkaline battery 3ea
- Power : APPROX.0.4W
- Display : 2.4" 320 x 240 HIGH QUALITY LCD with BLACK LIGHT
0 ~ 50.0Ton = xx.xx (0.01Ton pitch)
50.0 ~ 100.0Ton = xxx.xx (0.02Ton pitch)
100.0 ~ 500.0Ton = xxx.x (0.1Ton pitch)
500.0 ~ 1000.0Ton = xxx.x (0.5Ton pitch)
- Ambient temperature : -20°C ~ 60°C
- Storage temperature : -30°C ~ 70°C
- Humidity : 95%RH
- Coverage : Within 70M (Open space)
- Function : HOLD, AUTO ZERO, TOTAL DISPLAY, EACH WEIGHT DISPLAY, AVERAGE DISPLAY
- Operating time : Full operating 10 hours
- Material : ABS



BTR24



Load change chart screen by a search.



Actual load / real time indication screen & chart screen.

BTL50 WIRELESS REMOTE LOAD CELL

Load Cell

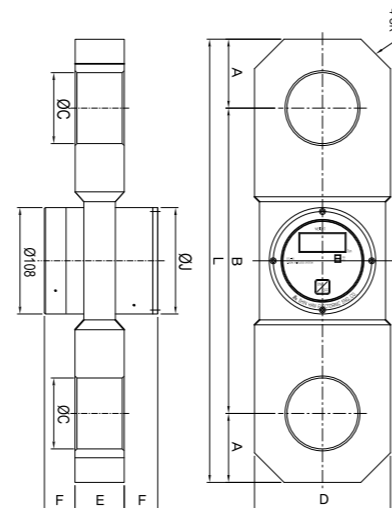
- MODEL NO. : BTL-50 Series
- Type : STRAIN GAGE TYPE LOAD CELL
- POWER : 1.5V ALKALINE BATTERY 4EA
- POWER CONSUMPTION : 0.4W
- COVERAGE : Within 70M(open space)
- OPERATING TIME : FULL OPERATION 24h
- OPERATING TEMPERATURE RANGE : -20°C ~ +60°C
- STORAGE TEMPERATURE RANGE : -30°C ~ +70°C

Function

- 4DIGIT 7 SEGMENT LCD
- HOLD function.
- Possible to confirm the normal or abnormal status of transmitting & receiving.
- The data preservation function. (OPTION)
- AUTO ZERO function.
- Three (3) stage's battery balance indication.
- Automatic off function when the data has not been received.



BTL50



BLOAD Only for the use of crane, overload protection device that the wireless communication function is supported 2.4GHz Spread Spectrum Radio Coad

Exclusive use of the crane, overload protective device with which the radio communication function is supported.

BLOAD guarantees an accuracy of load detection by the actual load detection, and it can add up the total load amount.

This overload protector has the high efficiency and a high convenience because there is each hoist's balance function. The radio communication function is supported, so wiring work isn't necessary, and installation is easy and the user can be understood and used with BLOAD easily.

Features

- By the actual load detection since strain gage type load cell is used, load detection accuracy is guaranteed.
- It's practicable for multiple hoist, 1st hoist, 2nd hoist, ... 4th hoist.
- The total load amount adding up function.
- Wiring work is unnecessary by radio communication between the sensor and the controller.
- Each side, transmitter & receiver, can confirm the actual load confirmation and load cell input value by everyone.
- There is little radio intervention at an industrial site by the 2.4 GHz standard communication regulation.
- Max. communication distance : 12km (the patch antenna needs when long-distance use more than 200m)
- The optional operation prevention by the password function.

Use

- Overhead crane, Gantry crane, Goliath crane, cargo crane
- Mobile crane (Hydraulic crane, Crawler crane, Angle crane)
- Hoist crane



WIRELESS SIGNAL CONTROLLER

Option

- The RS232 or RS485 supports a variety of communication formats
- ANALOGUE OUTPUT (0~10V, 4~20mA, 0~20mA)
- REMOTE Wireless Controller during operation, it is possible small REMOTE INDICATOR support or large external display support
- Separate external large displays, it is installable (Character height 3inch, 4inch, 6inch, 8inch etc.. It supports various text sizes)

Dimensions

- CONTROLLER : 250(W) x 400(H) x 115(D)
- MONITOR : 145(W) x 145(H) x 80(D)
- WIRELESS SUMMING BOX : 242(W) x 160(H) x 109(D)
- WIRELESS REMOTE INDICATOR : 110(W) x 180(H) x 44(D)
- LOAD CELL : Different depending on the crane model and installation location

	CONTROLLER	MONITOR	WIRELESS SIGNAL CONTROLLER	WIRELESS REMOTE INDICATOR	FEATURES
MODEL No.	SH-1000B1	SH-1000L	BLOAD-01	SH-BT40	- MICOM used to obtain reliable - Simple KEY BOARD SET - INTERFACE 4~20mA for external (option) 0~10V (option) - Wireless communication between the sensor and controller wiring required support
POWER SUPPLY	AC 110V/220V	DC +5V	AC110 or 220V	1.5V AA BATTERY 4EA	
WORKING TEMPERATURE RANGE	-20°C ~ 60°C	-20°C ~ 60°C	-20°C ~ 60°C	-20°C ~ 60°C	
RELATIVE HUMIDITY	95%RH	95%RH	95%RH	95%RH	
DISPLAY	-	7-SEGMENT FND TYPE	4DIGIT 7SEGMENT FND DISLAY	4DIGIT 7SEGMENT LCD DISLAY	
SUPPORTED	2.4GHz WIRELESS 2CHANNEL	-	2.4GHz WIRELESS	2.4GHz WIRELESS	
SIGNAL OUTPUT	ALARM, OVER (1a,1b)3A 250V Additional POINT of CONTACT Function	POWER : GREEN LED MAIN OVER : RED LED AUX OVER : RED LED	-	-	
MATERIAL	SS41	SS41	AL ALLOY	ABS	
SYSTEM ACCURACY			±1% ~ ±3%		

※ Dimensions and specifications can be changed without prior notice to improve performance.

SCI MONITORING SYSTEM

Samsung Corporation Construction Sector
Equipment Group Joint Development

S Crane Indicator Monitoring System

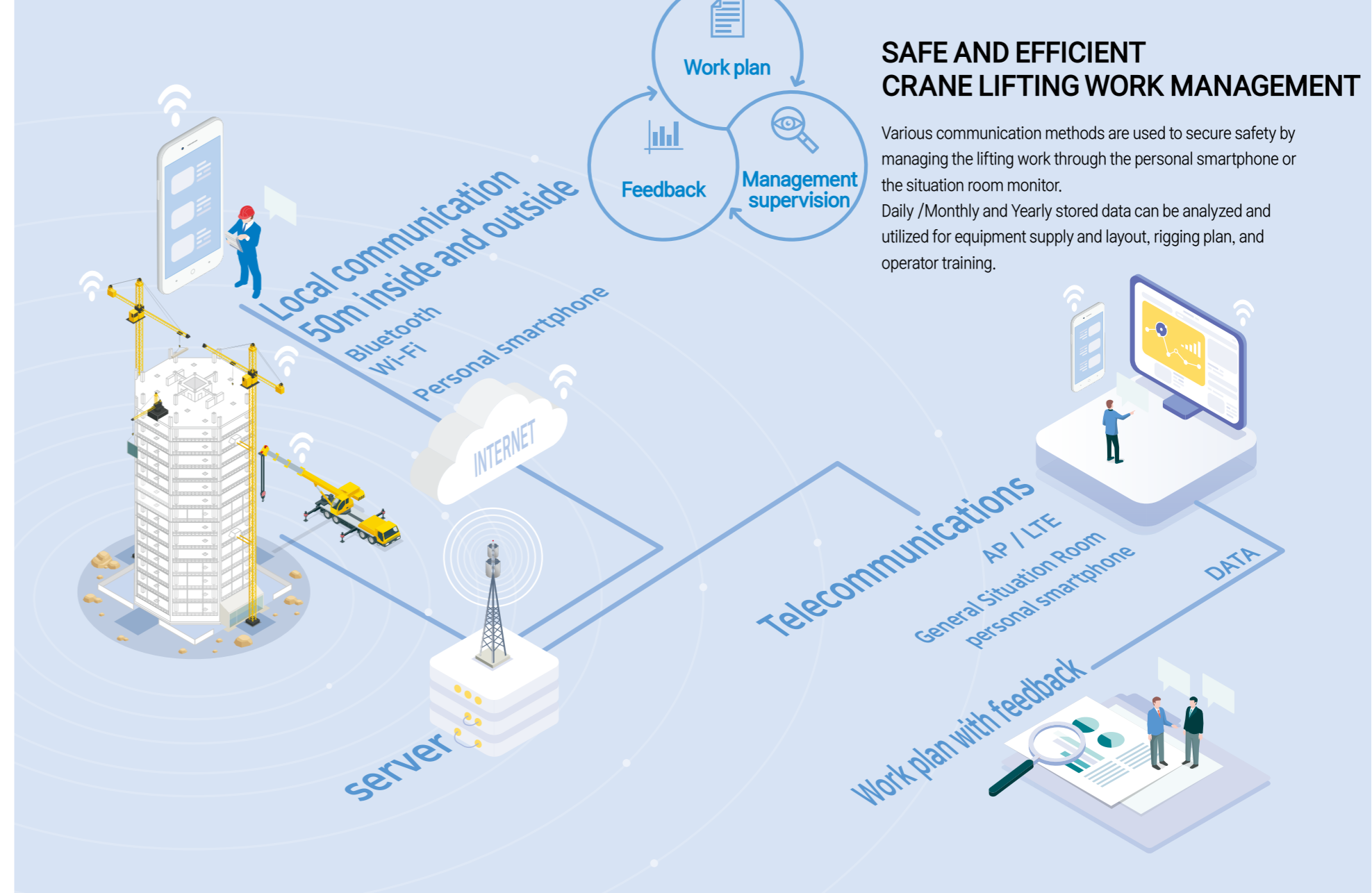


Cross check of manager is required.

When plan the work, operator decide how to hook up considering the weight of the weight and the working radius. Therefore, if the work plan is not the same as the actual work, there is a greater possibility of an accident leading to arbitrary judgment of the operator. The SCI monitoring system helps administrators manage equipment safely and efficiently by receiving real-time, diverse lifting data and warning alarms from the indicators without having to ride directly into the cabin.



SCI MONITORING SYSTEM STRUCTURE



SAFE AND EFFICIENT CRANE LIFTING WORK MANAGEMENT

Various communication methods are used to secure safety by managing the lifting work through the personal smartphone or the situation room monitor. Daily /Monthly and Yearly stored data can be analyzed and utilized for equipment supply and layout, rigging plan, and operator training.



Kind of system

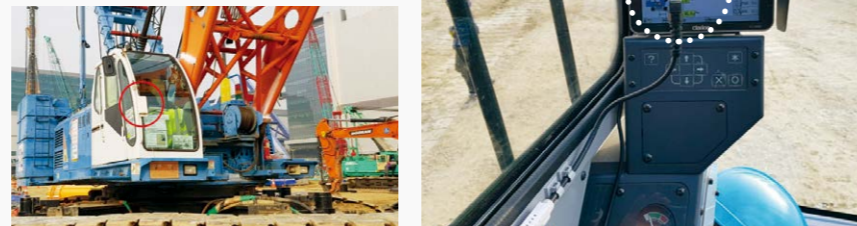
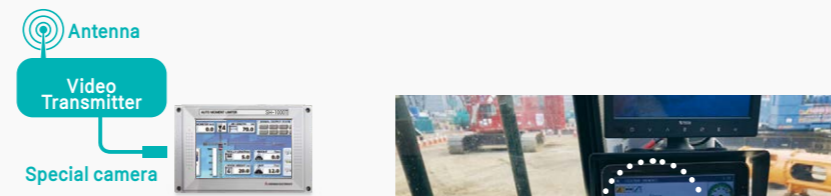
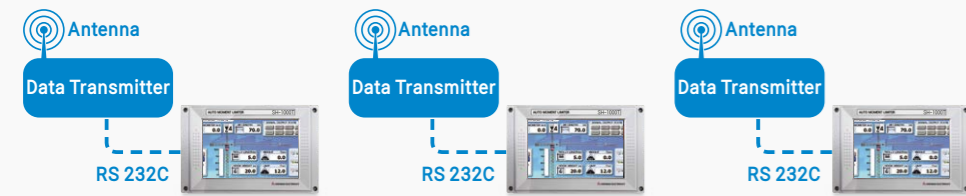
Data Protocol (TEXT) type

- Real-time monitoring of lifting work (lifting weight, lifting capacity, working radius, boom angle, etc.)
- Automatic alarm SMS to the administrator during heavy lifting or unauthorized lifting (lunch time, night, etc.)
- Analysis of lifting data (working hours, operation rate, working load relative to lifting capacity, etc.)
- ※ Applicable in Shinhan Electronics Indicator



Video mirroring (screen duplication) type

- Real-time monitoring of lifting work (lifting weight, lifting capacity, working radius, boom angle, etc.)
- ※ Because it uses special camera, it can be applied to all indicators



SCI monitoring system classification by device

Division		AP	LTE	Bluetooth	
Data protocol	Mobile crane	Component	Crane data transmitter 1EA, AP 1EA ※ Server PC construction and AP network configuration required	Crane data transmitter 1EA, LTErouter 1EA ※ Server PC construction and join to Lte plan	Crane data transmitter 1EA, Bluetooth antenna 1EA,
		Function	Real-time monitoring of crane data with situation room server PC and smartphone (N at the same time) SMS transmission function according to crane condition - Send SMS when heavy lifting - Send SMS when unauthorized lifting (lunch time, night.) - Send SMS when long time inactivate working	Real-time monitoring of crane data with situation room server PC and smartphone (N at the same time) SMS transmission function according to crane condition - Send SMS when heavy lifting - Send SMS when unauthorized lifting (lunch time, night.) - Send SMS when long time inactivate working	Real-time monitoring of crane data to a private mobile phone within Bluetooth range (50M) ※ Extend reception distance when using high-end antenna
	Suitable site	A large-scale construction site	A large-scale construction site	A large-scale construction site	
	Tower crane	Component	Crane data transmitter 1EA, AP 1EA ※ Server PC construction and AP network configuration required	Crane data transmitter 1EA, LTErouter 1EA ※ Server PC construction and join to Lte plan	Crane data transmitter 1EA, Bluetooth antenna 1EA,
Function		Real-time monitoring of crane data with situation room server PC and smartphone (N at the same time) SMS transmission function according to crane condition - Send SMS when heavy lifting - Send SMS when unauthorized lifting (lunch time, night.) - Send SMS when long time inactivate working	Real-time monitoring of crane data with situation room server PC and smartphone (N at the same time) SMS transmission function according to crane condition - Send SMS when heavy lifting - Send SMS when unauthorized lifting (lunch time, night.) - Send SMS when long time inactivate working	Real-time monitoring of crane data to a private mobile phone within Bluetooth range (50M) ※ Extend reception distance when using high-end antenna	
Suitable site	A large-scale construction site	A large-scale construction site	A small-scale construction site		

Division		AP	LTE	Wi-Fi	
Video mirroring	Mobile crane	Component	Transmitter-receiver 1EA, Antenna 2EA, Camera 1EA, Battery Pack 1EA, Battery Pack Charger 1EA, Power input cable for vehicles 1 EA, 220 V power input cable 1 EA, camera fixed clip 10 EA, Double-sided tape 1EA, Multi-Seeker jack 1EA, Hard case 1EA, AP 1EA ※ Server PC construction and AP network configuration required	Transmitter-receiver 1EA, Antenna 2EA, Camera 1EA, Battery Pack 1EA, Battery Pack Charger 1EA, Power input cable for vehicles 1 EA, 220 V power input cable 1 EA, camera fixed clip 10 EA, Double-sided tape 1EA, Multi-Seeker jack 1EA, Hard case 1EA, LTErouter 1EA ※ Server PC construction and AP network configuration required	Transmitter-receiver 1EA, Antenna 2EA, Camera 1EA, Battery Pack 1EA, Battery Pack Charger 1EA, Power input cable for vehicles 1 EA, 220 V power input cable 1 EA, camera fixed clip 10 EA, Double-sided tape 1EA, Multi-Seeker jack 1EA, Hard case 1EA. ※ Separate repeater (repeater antenna 2EA, repeater charger)
		Function	Indicator screen mirroring of crane data with situation room server PC and smartphone (N at the same time)	Indicator screen mirroring of crane data with situation room server PC and smartphone (N at the same time)	Real time monitoring of indicator screen by mobile phone (50M) [Up to 2 simultaneous] ※ Increase Wi-Fi range when using repeater (50M)
	Suitable site	A large-scale construction site	A large-scale construction site	A small-scale construction site	
Tower crane	Component	Transmitter-receiver 1EA, Antenna 2EA, Camera 1EA, Battery Pack 1EA, Battery Pack Charger 1EA, Power input cable for vehicles 1 EA, 220 V power input cable 1 EA, camera fixed clip 10 EA, Double-sided tape 1EA, Multi-Seeker jack 1EA, Hard case 1EA, AP 1EA ※ Server PC construction and AP network configuration required	Transmitter-receiver 1EA, Antenna 2EA, Camera 1EA, Battery Pack 1EA, Battery Pack Charger 1EA, Power input cable for vehicles 1 EA, 220 V power input cable 1 EA, camera fixed clip 10 EA, Double-sided tape 1EA, Multi-Seeker jack 1EA, Hard case 1EA, LTErouter 1EA ※ Server PC construction and AP network configuration required	<ul style="list-style-type: none"> ● Application site : Hwasung E PJT, World Cup Bridge PJT, Bujeon Masan Railway PJT ● Applied equipment : Tower cranes, mobile cranes, strand jack ● Work method : general lifting, compositeness lifting 	
	Function	Indicator screen mirroring of crane data with situation room server PC and smartphone (N at the same time)	Indicator screen mirroring of crane data with situation room server PC and smartphone (N at the same time)	<ul style="list-style-type: none"> ※ What is compositeness lifting? Using two or more equipment, one heavily weighted thing. 	
Suitable site	A large-scale construction site	A large-scale construction site			

DIGITAL LASER STAFF

DS2008 / SH-LDR30

SH-LDR60

SH-LDR80

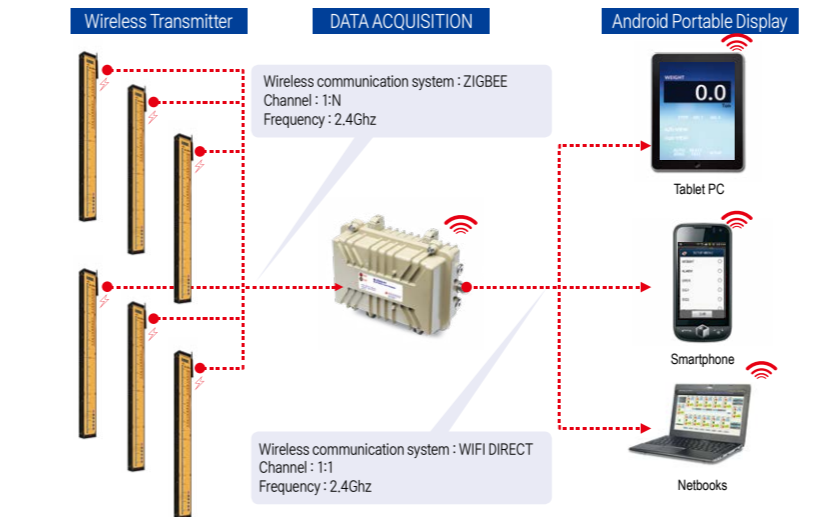
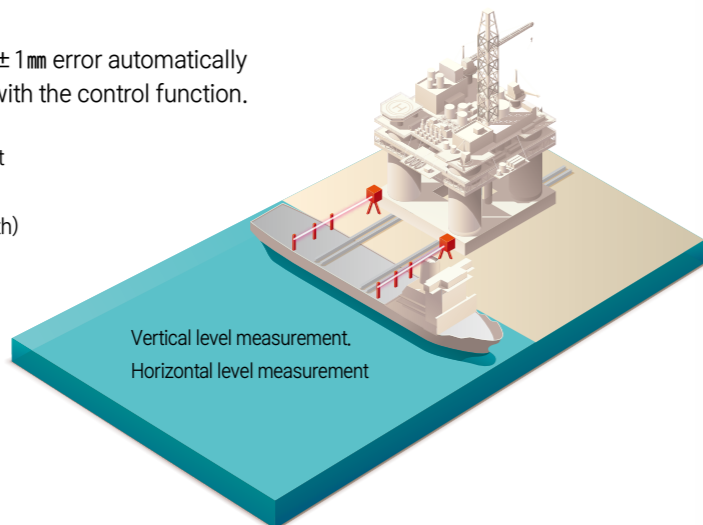
Collaboration on a work with the Daewoo Shipbuilding & Marine Engineering Co.,Ltd.



SHINHAN Electronics gives correctness to you by SH-LDR60 laser diode.

The compact size is very convenience for using and carrying. DIGITAL LASER STAFF measures the laser beam location within the ±1mm error automatically in 100m radius, and indicates the digital level value and is equipped with the control function.

- A laser staff uses photo sensor of the exclusive use of laser receiving, and it realizes the location of the laser beam of at least ±150mm length. (DS2008/LDR30 : 300mm length, LDR 60 : 600mm length, LDR 80 : 800mm length)
- It's possible to have the circuit from which light on which the environment is scattered is insulated built-in, so it can do highly reliable detection.
- When the distance between the laser transmitter and the laser staff is longer the light of the destination is larger, at that time the concentration of the light can be searched and indicated correctly due to filtering process by soft ware and hard ware-like.



The use and its strong point

- Horizontal level measurement.
- Vertical level measurement.
- Gradient measurement.
- x, y, z level detection depends on its installation status.
- A portability is easy by its light weight.
- Receiving Laser is indicated by the 1mm unit numerical value.
- It's possible to confirm the previous level by the level holding function.
- By the use of the top and the lower part jig, it's possible to fix the laser staff on the installation places.

Specifications

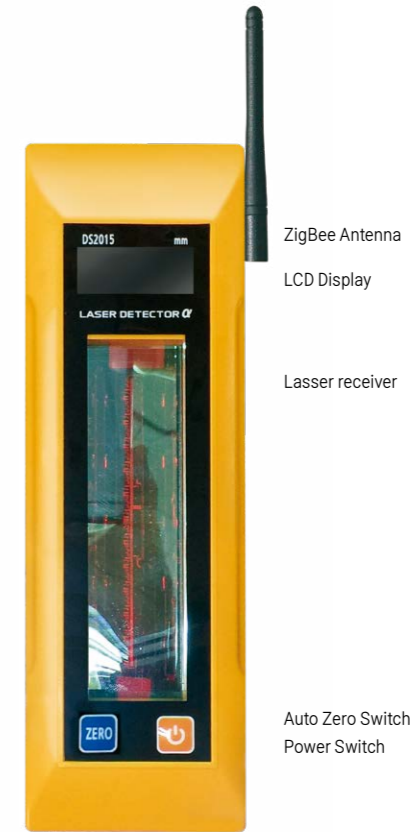
- Supply voltage : DS2008/SH-LDR30 (AA 1.5V × 4EA BATTERY)
LDR-60 (AA 1.5V × 8EA BATTERY)
LDR-80 (Lithium-ion PACK (14.8V/2,200Q))
- Standard time 10 hours(Uptime 5 hours)
- Power Consumption : DS2008/SH-LDR30 NORMAL 0.5W or less(MAX 0.9W)
LDR-60 (1.3W)
LDR-80 (2.4W)
- Ambient temperature : -20°C ~ 60°C
- Storage Temperature : -30°C ~ 80°C
- Humidity : Less than 95% RH
- DISPLAY : STN DYNAMIC SEGMENT LCD
- OUTPUT : Received by the high-brightness LED status display
- SENSOR : PIN PHOTO DIODE
- Receiving angle range : Within ±30°
- Detection error : ± 1mm
- Laser detection time: About 1 second

※ Dimensions and specifications can be changed without prior notice to improve performance.

LASER DETECTOR ALPHA DS2015

Use Linear Array Sensor, High precision level Target - Laser Detector Alpha

High-precision measurement to a level error is within 0.1mm. All the red laser(630nm~670nm) in response to rotation.



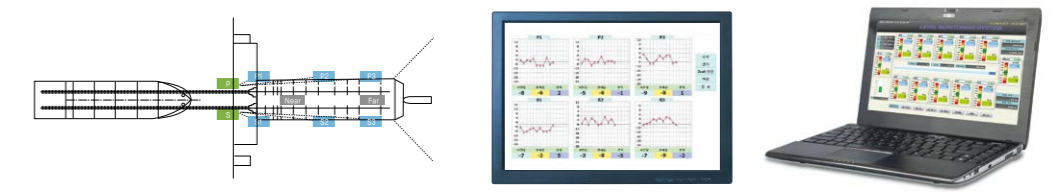
Uses and Benefits

- Horizontal level measurement
- Tilt measurements
- Easy to portable from light weight
- Laser show received a 0.01mm unit value
- It can be fixed using the upper lower jig operations
- Vertical level measurement
- Installation according to X, Y, Z image detection

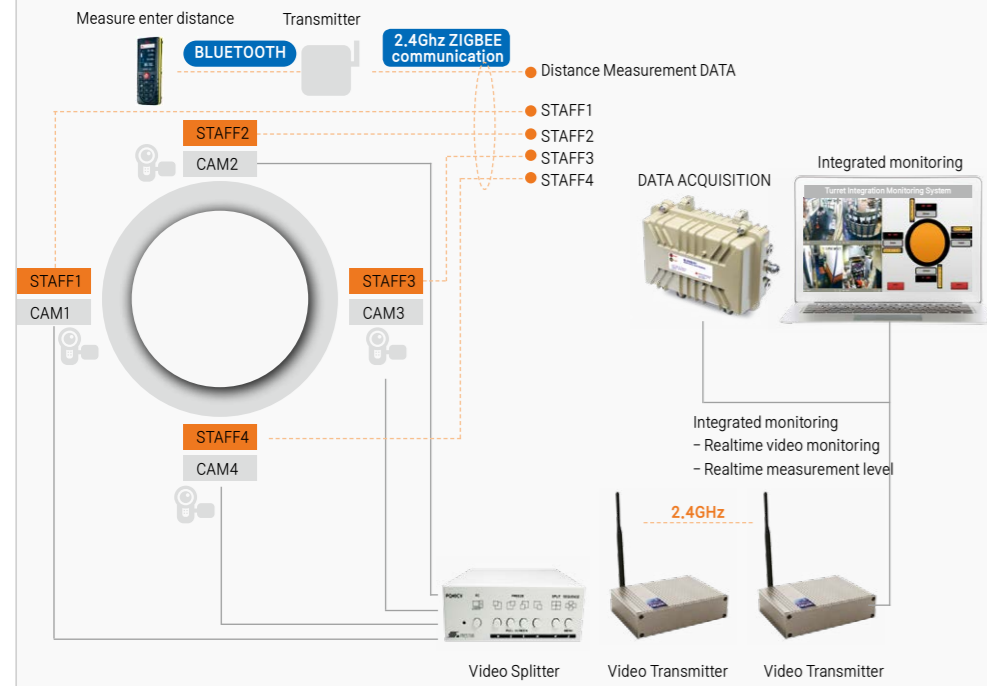
Specifications

- Power supply voltage : Lithium-ion 8.4V CHARGE
- Standard working 10hours(Continuous use time 5 hours)
- Power Consumption : ABOUT 2.5W
- Use ambient temperature : -20°C ~ +60°C
- Storage temperature : -30°C ~ +80°C
- Humidity : Below 95%RH
- DISPLAY : LED DISPLAY
- OUTPUT : Status indication received through High-Brightness LED
- SENSOR : LINEAR ARRAY SENSOR
- Light receiving angle range : Within ± 15 °c
- Detection error : ±0.1mm
- Laser detection time : About 1 second

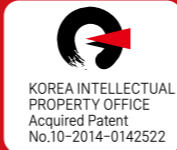
※ Dimensions and specifications can be changed without prior notice to improve performance.



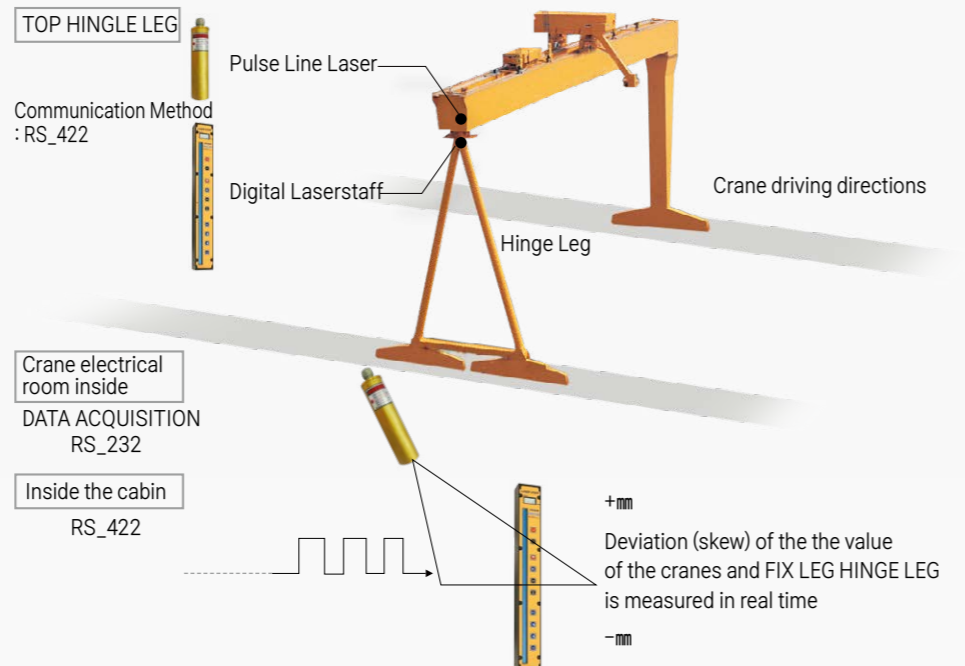
TURRET INTEGRATION MONITORING SYSTEM



GOLIATH CRANE SKEW LEVEL MONITORING SYSTEM



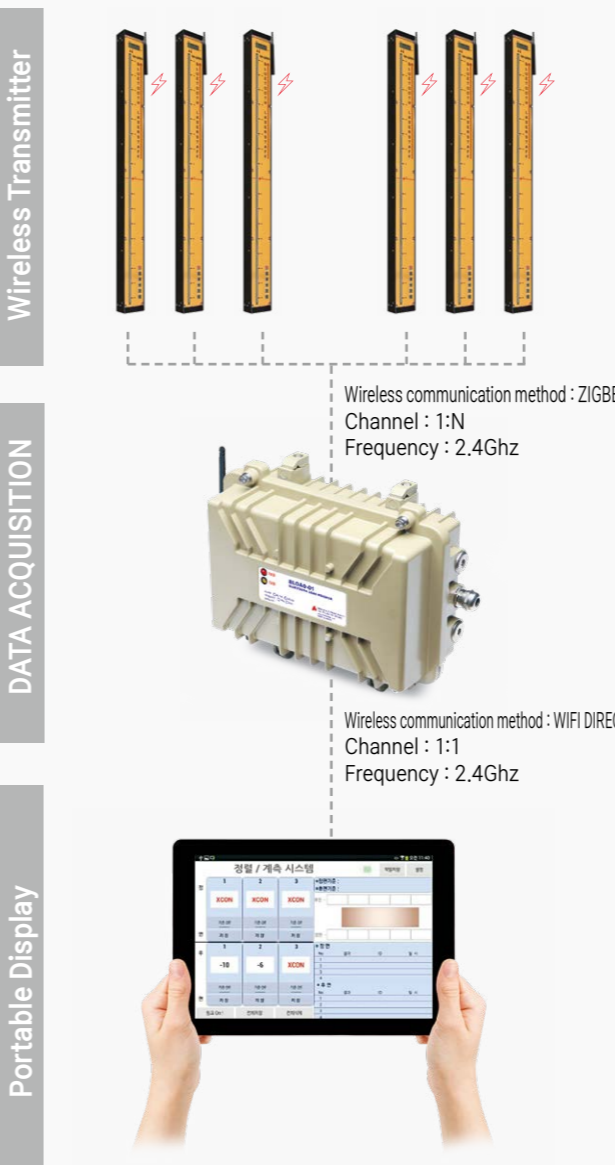
- LASER STAFF DATA acquisition
- The current level of operations skew
- Contact according to the current state of skew level
- Analog signal output according to the current state of skew level



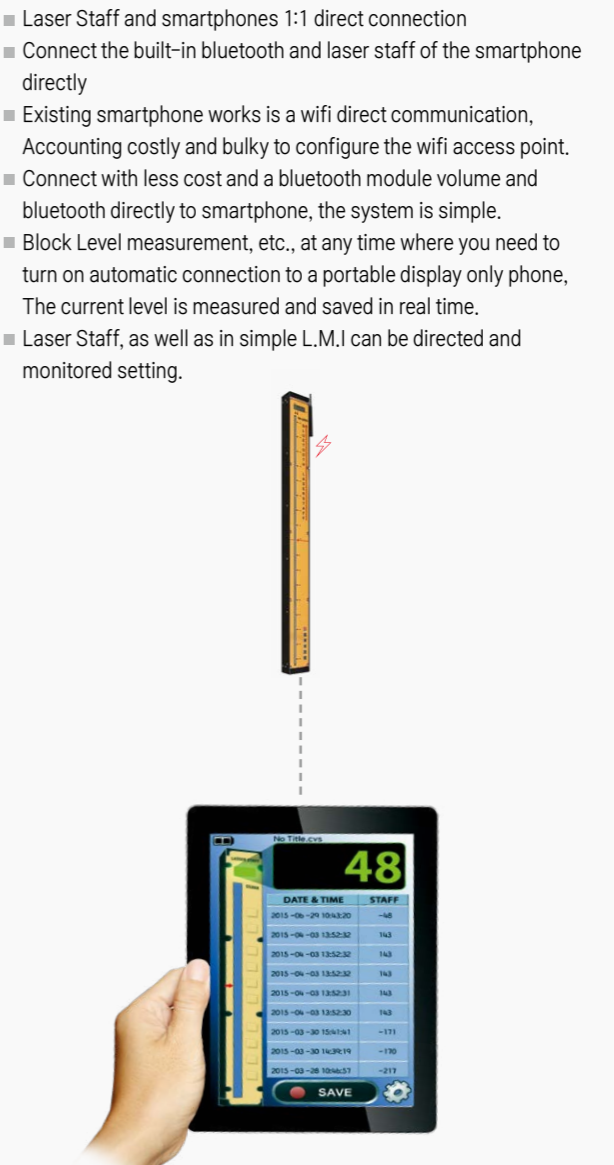
■ DATA ACQUISITION DISPLAY and output conditions

LASERSTAFFStaff(mm)	Skew level(mm)	Relay output	4~20mA Output
13	1000	PG0	20mA
8	600	PG1	
6	450	PG2	
0	0	PG3	12mA
-6	-450	PG4	
-8	-600	PG5	
-13	-1000	PG6	4mA

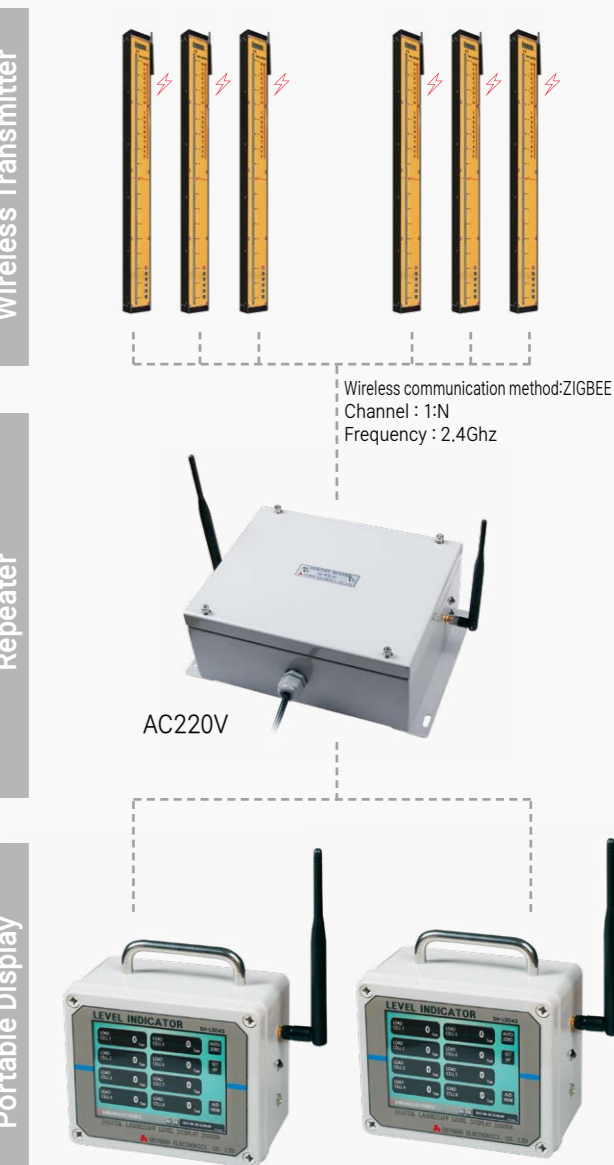
Wi-Fi WELESS LEVEL MONITORING SYSTEM



DIRECT WIRELESS LEVEL MONITORING SYSTEM



ZIGBEE WIRELESS LEVEL MONITORING SYSTEM



LOAD CELL

Load cell by which a monitor is built-in

- Real weight display
- Auto zero
- Supply Voltage : DC7V ~ 25V
- Electric Power : 0.3W
- Display : 4digit LCD

The various type Load Cell that strain gages are bonded is to measure load of structure.



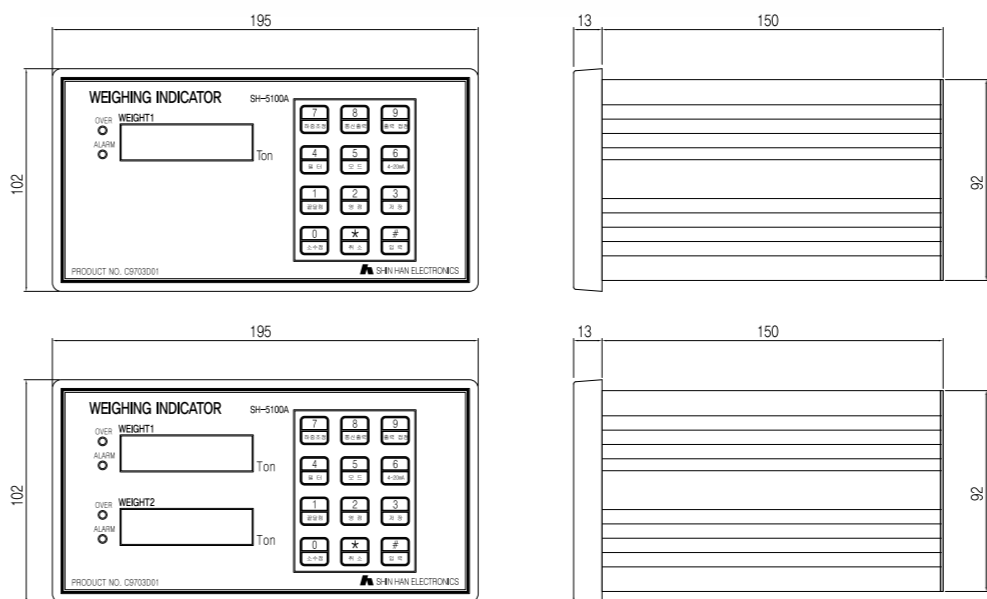
LOAD CELL SELECTION CHART

DIVISION	STL	SCL	SACK	SCKW	SSCKW	SSDP	MSR	MSRW	MCL	SPE	TPC	SFL	SFM	SEM	SMC	PSC	PBL	SBK	SHK	MST	MCT	PCL	TWP	TPR	TRSH	SCA	SBHM	
1kg													●															
3kg													●															
5kg													●															
10kg													●		●													
20kg													●		●	●												
30kg													●		●	●												
50kg	●												●		●	●												
100kg	●												●		●	●												
200kg	●												●		●	●												
300kg	●		●										●		●	●												
500kg	●	●											●		●	●												
1t	●	●											●		●	●												
2t	●	●	●										●		●	●												
3t	●	●	●										●		●	●												
5t	●	●	●										●		●	●												
10t	●	●	●				●	●	●				●		●	●												
15t	●	●	●				●	●	●				●		●	●												
20t	●	●	●				●	●	●				●		●	●												
25t	●	●	●				●	●	●				●		●	●												
30t					●		●	●	●				●		●	●								●	●	●	●	
50t				●	●	●	●	●	●				●		●	●							●	●	●	●	●	
100t				●	●	●	●	●	●				●		●	●							●	●	●	●	●	
200t				●	●	●	●	●	●				●		●	●							●	●	●	●	●	
300t				●	●	●	●	●	●				●		●	●							●	●	●	●	●	
500t							●	●	●				●		●	●							●	●	●	●	●	
1000t								●	●				●		●	●							●	●	●	●	●	

Only SKY CRANE

※ Special specifications, please consult us.

LOAD CELL INDICATOR



Model SH-5100 series

INDICATOR which indicates the value of the output for all kinds of strain gage type load cells or the value for the output of strain gage application products.

SH-5100 SERIES is indicator to display the value of the output of various kinds STRAIN GAGE TYPE LOAD CELL or STRAIN GAGE applications. It can be used as a measurement for the purpose, RS232C SERIAL DATA output for an optional external interface.

※PRINTER output function is also available products.(Built-in mini printer possible)

Features

- Can be lightweight mobile
- High precision measurements can be used as a high-resolution AD CONVERTER (± 1/2000)
- Easy operation with various settings NUMERICAL KEYPAD way.
- Password function prevents any operation
- Multiple channels can be used (option)

Specifications

- MODEL NO : SH-5100series
- POWER : AC 110V, 220V 60Hz 1Ph
- POWER CONSUMPTION : 45W
- DISPLAY
7-SEGMENT 4-DIGIT FND TYPE
7-SEGMENT 5-DIGIT FLD TYPE
- OPERATING TEMPERATURE RANGE : -10°C ~ 60°C
- STORAGE TEMPERATURE RANGE : -30°C ~ 70°C

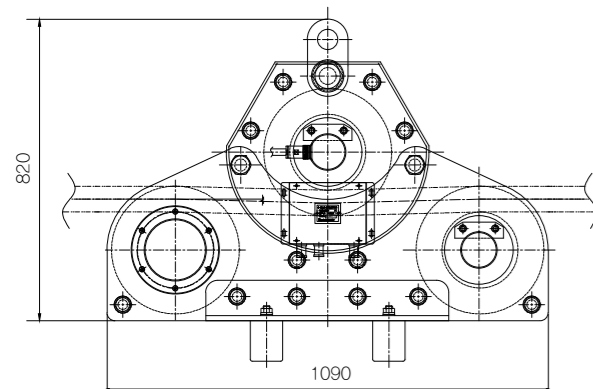
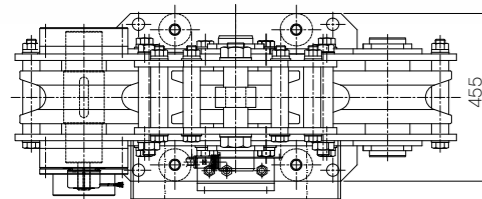
Option

- RS-232C OUTPUT
- MULTI CHANNEL (MAX 2CHANNEL)
- BCD OUT PUT
- 4~20mA OUTPUT
- RS-422 OUTPUT
- ntegration capabilities

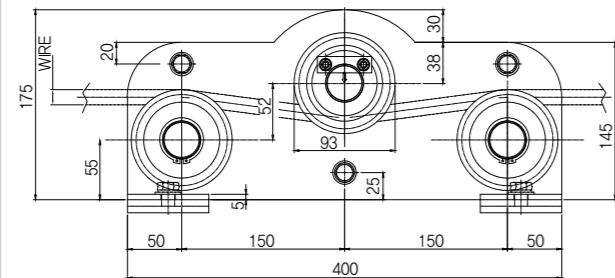
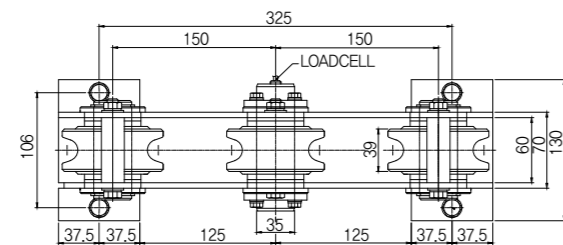
LOAD DETECTOR (3 Sheave type)



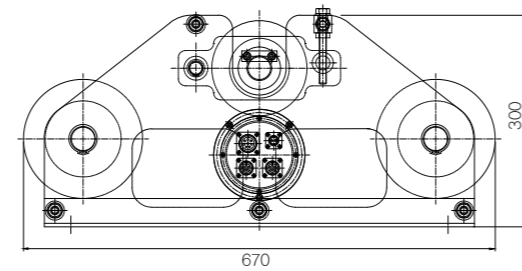
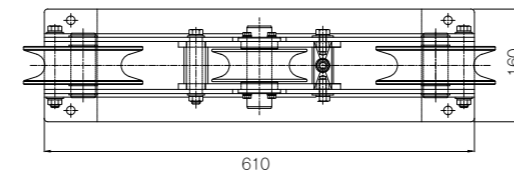
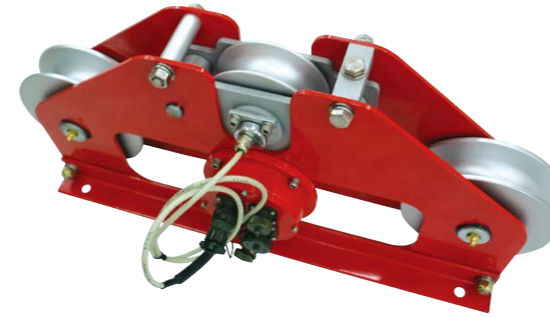
SH-D8



SH-D4



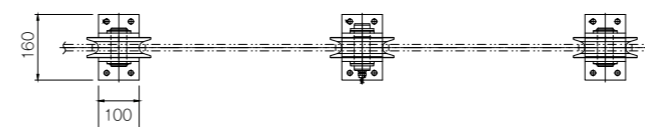
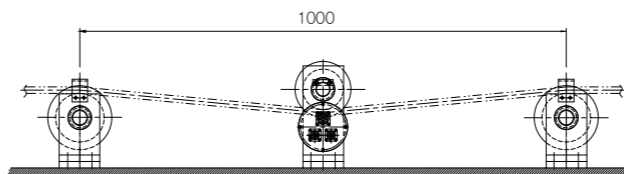
SH-D2



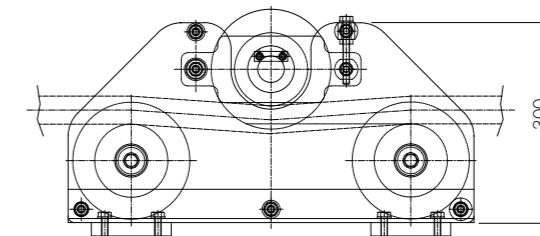
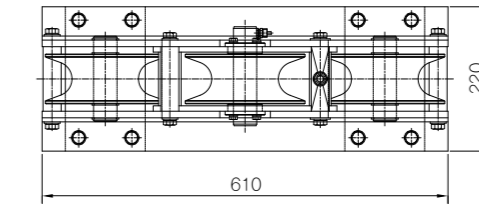
LOAD DETECTOR (3 Sheave type)



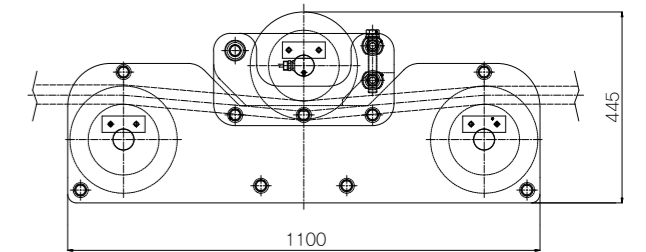
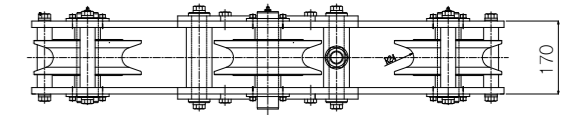
SH-D3



SH-D5



SH-D6



LOAD DETECTOR Specifications

DIVISION	LOAD DETECTOR(3 Sheave)	The thickness of the wire rope	Install Location	Apply cranes
SH-D2		Ø32(Max.)	WIRE ROPE	CRAWLER CRANE
SH-D3		Ø14~Ø26	WIRE ROPE	HYDRAULIC CRANE
SH-D4		Ø8, Ø10, Ø14, Ø18	WIRE ROPE	CARGO CRANE
SH-D5		Ø52(Max.)	WIRE ROPE	CRAWLER CRANE / WINCH SYSTEM
SH-D6		Ø80(Max.)	WIRE ROPE	WINCH SYSTEM
SH-D8		Ø115(Max.)	WIRE ROPE	WINCH SYSTEM

※ Special specifications, please consult us.

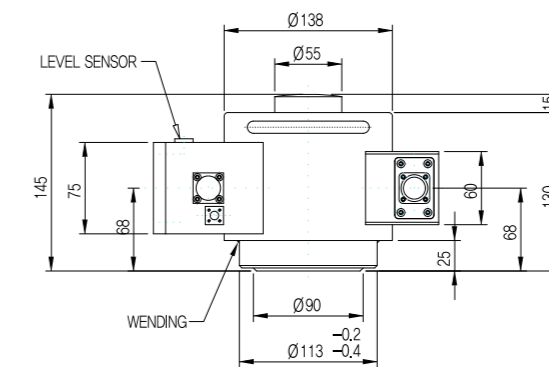
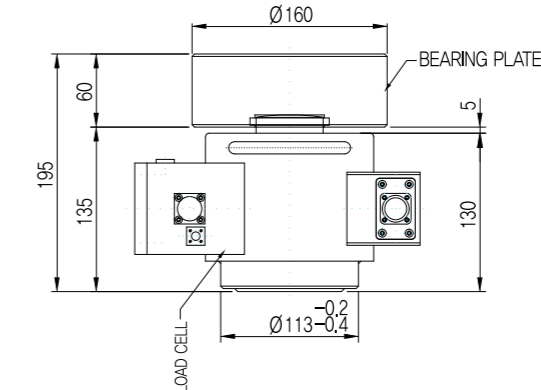
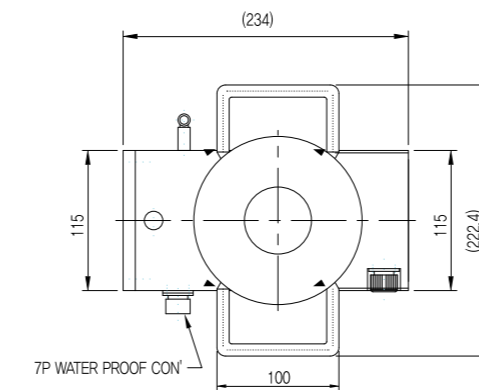
LOAD MEASUREMENT SYSTEM

Precise measurement system for the correct weight value and the center of gravity



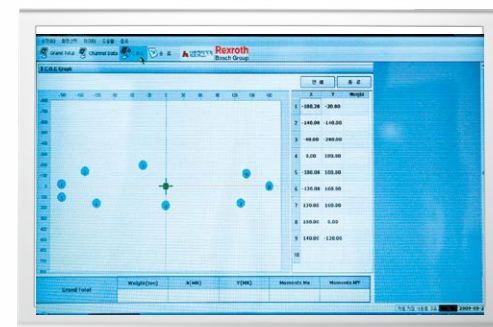
Please measure also the large weight precisely and safely by using the advanced devices easy at site.

This is a weighing measurement system for a large-volume structure. Because a wireless module is built-in to load cell it's possible to collect data. By using computer, whole load (the total weight) and C.O.G (Center of Gravity) value are indicated, and it's possible to output by a printer. It's possible to use the number of the biggest connection of the load cell by at most 80 and change the name of the location and the location of each load cell through a PC program, and it's prepared for all kind of project.

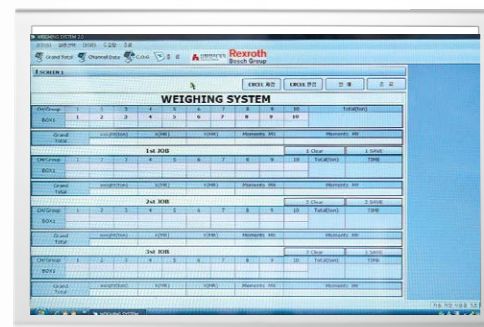


CONTROLLER

- Model : SH-510RSW series
- Power supply : AC220 ± 10%, 60Hz, 1Phase
- Operating temperature range : -10°C ~ 50°C
- Relative humidity range : 20% ~ 85%RH
- Display : 320 × 240 GRAPHIC LCD (MONO · BACKLIGHT)
EACH WEIGHT XXX.X Ton
TOTAL WEIGHT XXXX.X Ton
- Output : RS232 OUTPUT FOR PC
RS422 OUTPUT TO REMOTE INDICATOR
- Input signal :
Wire : RS422, 9600bps (From LOAD CELL) 10CHANNEL
Wireless : 2.4 GHz WIRELESS
- Key board : Channel Q'ty select, Box No Set, Division Set
- Wireless range : Within 100m (Open space)



C.O.G (Center of Gravity) indication screen.



Each load cell's load indication screen by real time.



30ch Monitor



MSRW BUILT-IN 2.4GHz WIRELESS MODULE

SH-EP-750LC

Explosion-Proof Over Load System



Explosion-Proof Over Load System

Korea Occupational Safety and Health Agency Certification

Form Model	SH-EP-750LC(C)	Volume Rating	J-1	Certification numbers	22-AV2BJ-0029
	SH-EP-750LC(P)		J-1		22-AV2BJ-0030
	SH-EP-750LC(T)		J-1		22-AV2BJ-0031

This device has passed the pressure/dust explosion proof test by the Korea Occupational Safety and Health Agency, and has been certified as Class Ex d IIB+H₂ T6, tD A21 class IP66.

It is specially designed and manufactured so that the flame does not spread to the outside when the explosive gas or vapor explodes due to the electric spark and high temperature generated during the use of an electric device in a place where explosive gas or vapor is present.

SH-EP-750LC Explosion-Proof Over Load System is a combination of J-1 TYPE Electronic OVER LOAD LIMITER and Explosion-Proof Case, STRAIN GAGE TYPE Flameproof enclosure LOAD CELL is used as a basic sensor to detect the current load accurately and to output an alarm and cut-off contact point in case of overload. It is a product that can prevent safety accidents in advance by electrically blocking human and material disasters that may occur due to overloads exceeding the rated load.

Feature

- Accurate load detection and display using STRAIN GAGE TYPE LOAD CELL
- Explosion-Proof Zone Overhead Crane/Gantry Crane/Hoist Crane/Elevator, etc.
 - Load display (0.1 Ton unit, 4 DIGIT)
- On-site setting possible by simple operation
- Filtering function in preparation for crane shaking (momentary malfunction prevention function)
- Built-in MICRO PROCESSOR and WATCHDOG TIMER
- Option
 - SERIAL OUTPUT RS-485

DIVISION	CONTROLLER	FEATURE
MODEL	SH-EP-750LC	Number of crane hooks, number of weight sensing sensors, and output contacts according to load (weight value can be set)
HOOK	1	
LOAD CELL	1 ~ 4	
DISPLAY	WEIGHT : 4 DIGIT	
OUTPUT SIGNAL	ALARM, OVER	
CONTACT CAPACITY	DRY CONTACT (250VAC 5A)	
Power supply voltage	100~240Vac ± 10%, 50/60Hz 1Ph	
Power consumption	APPROX 15W	
Operating temperature	-20°C ~ 60°C	
Humidity	95%RH	
System extent	± 1 ~ 5%(Depends on system configuration and specifications)	
Quality of the material	AC4C	
Size	250(W)X250(H)X150(D)	

※ Dimensions and specifications can be changed without prior notice to improve performance.

DOSING EQUIPMENT SH-DES-2000

Development of hydraulic 2 liquids type dispenser for the first time in Korea

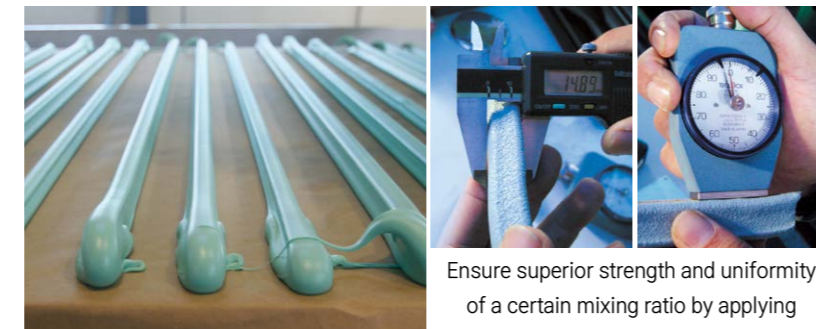


Shinhan has been saving time and money in the lighter weight and efficiency of work with the convenience of movement installation on pure technical capabilities!

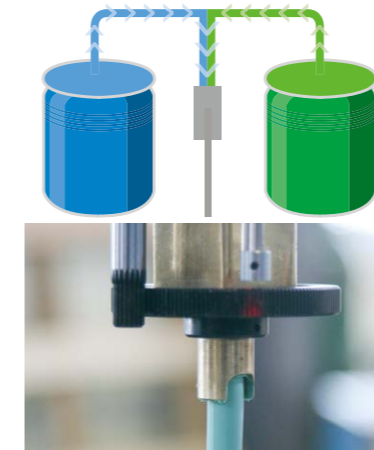
When installing Secondary Box of cargo window of the LNG carrier, it is equipped to carry out one after another series of processes of supply, transport, Epoxy Resin coating, and ex-work a variety of Insulation Box. On the characteristics of the equipment, Shinhan achieved a simplification of procedures and weight lightening. So we became to maximize the efficient space utilization and simplify the installation. Smooth supply of parts and stability of the SYSTEM by any I/O control of NETWORK method using the PLC all SYSTEM is possible. Also it is possible to repair equipment and operate the quick ERROR CHECK using the PC LADDER PROGRAM during maintenance.

1. Model No.: SH-DES-2000
2. Power Source
Electric power : AC220V 3P 60Hz
Compressed air : 5 bar ~ 7 bar
3. Operating Temperature Range : -20°C ~ 50°C
4. Storage Temperature Range : -30°C ~ 60°C
5. Transfer range and ability
6. Working Load weight : Max 150Kg
7. Product Standard in Size : 1,000mm x 1,200mm (Max.1,350mm)
8. Product processing speed : 200sec / box

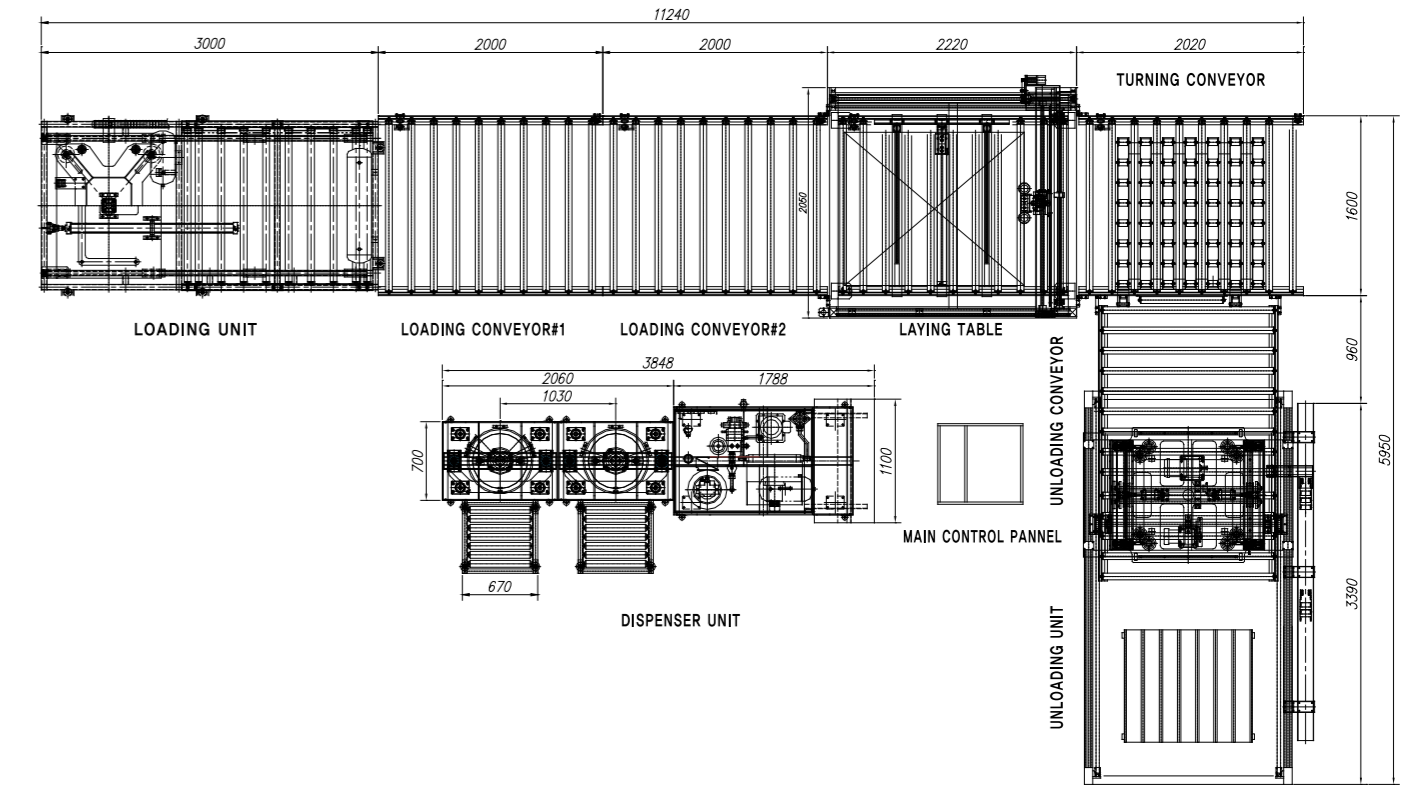
CERTIFICATE OF PATENT



Ensure superior strength and uniformity of a certain mixing ratio by applying



A two-component mixing system
MIXER & NOZZLE decomposition cleaning



LOADING UNIT



LOADING CONVEYOR



LAYING TABLE



DISPENSER UNIT



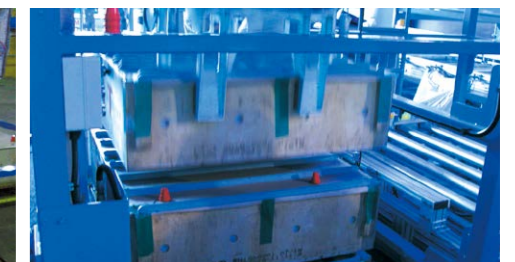
DISPENSER UNIT



TURNING CONVEYOR



CONTROL DESK(IPC)



UNLOADING UNIT

CRANE CABIN

Developed the customized crane cabin for customers

The high quality cabin of the crane to be met with field circumstance and user's request gives double satisfaction to the customers.

We have our unique technology of designing and producing the Crane Cabin suitable to site environments and working conditions of facilities. The Crane Cabin of SHINHAN HUVANCE Co.,Ltd. featuring outstanding durability and firmness, is based on the know-how having been accumulated by Shinhan Electronics specializing in safety over the last three decades so that its safety and efficiency are maximized.

One-Stop based Design and Manufacturing

The Crane Cabin of SHINHAN HUVANCE Co.,Ltd. is developed by One-Stop System in which the design department meets customers' requirements in designing and manufacturing products.

Excellent Design and Highly-Satisfying Completion

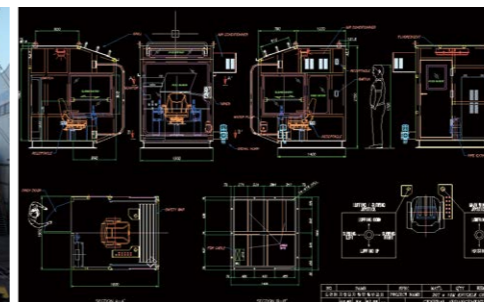
Specialists in crane design directly communicate with customers for highly ergonomic and efficient designs. In addition, high-quality products are developed by the process of designers' direct manufacturing supervision.

Perfect customer service

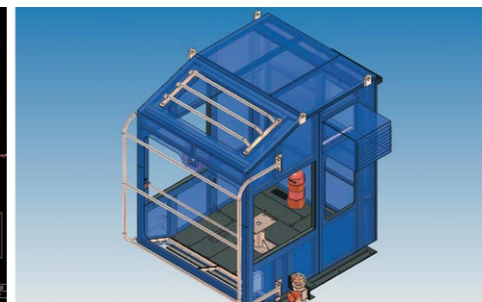
With respect to the problems caused according to the change of the rough-site, high customer satisfaction with the immediate customer service, the fault occurs before the fast parts replacement and repair of faith.



Site study for a design which fits the environment of the site exactly.



Technological design which fits user's human body proportion.



Virtual simulation through a three-dimensional advance design.



Site construction of cabin through the precise making process.

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