



DOCKING SUPPORT SYSTEM DL-3000

- ◆ Wide capability for various ship

Laser of DL-3000 system targets against parallel part at the ship board and achieve stable measurement even for shallow drafted ship.

- ◆ Compliance with safety class

Laser sensor is complied with safety standard JIS C 6802 class 1.

- ◆ Vivid-visibility

Measured data is vividly displayed and also can be output as record data.

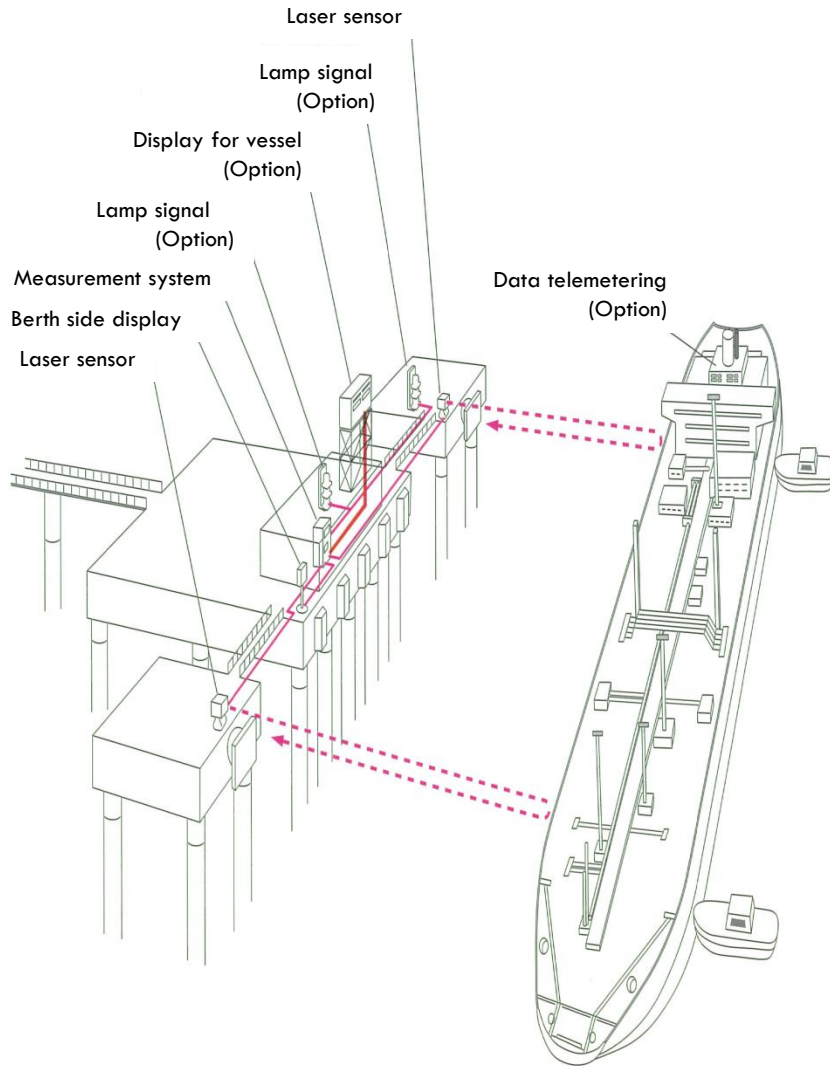
- ◆ Fully-functioned alarm system

Variety of alarms such as over-speed alarm, ripping alarm and berthing angle alarm has been functioned for berthing support as safely.

- ◆ Variety option

DL-3000 system can extend and connect with further option such as large display for vessel, Signal lamp alert, data telemetering etc.

System component



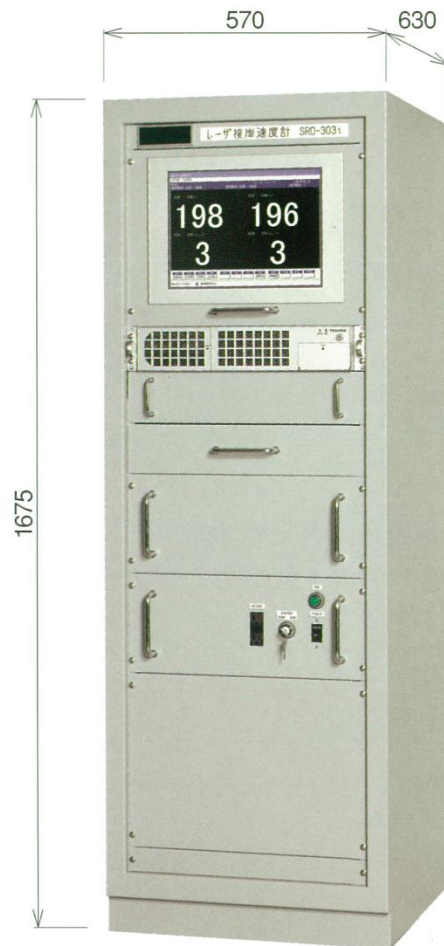
No	Type	Q'ty	Description
1	Measurement system	1 set	
2	Laser sensor	2 pcs	
3	Berth side Display	1 pc	
4	Signal lamp (option)	1 set	3 color signal lamp (Ex/Non-Ex)
5	Display for vessel (option)	1 set	LED display (Ex/Non-Ex)
6	Telemetering (option)	1 set	Wireless system
7	Cables	1 set	

Specification

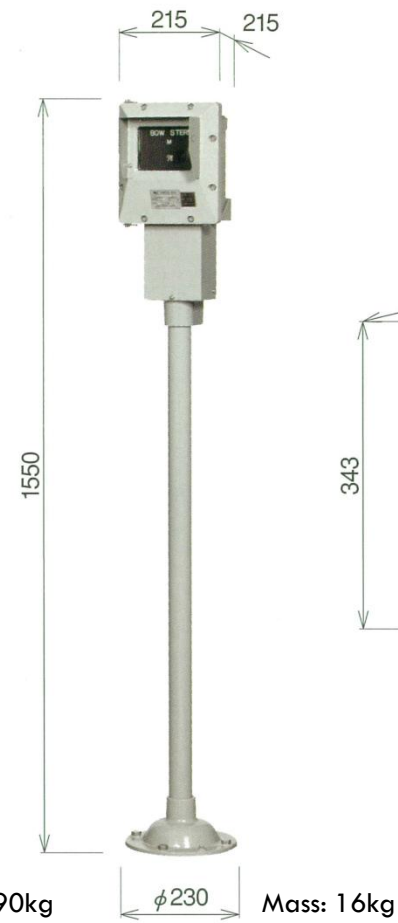
Item	Description
Measuring item	Distance between Bow to Berth and Stern to Berth
Measuring method	Lase Pulse Echo
Measuring range	Distance : -1 ~ 199m
	Speed : 0~+/-99 cm/sec (+: Docking / -: Ripping)
	Angle coverage : less than +/-15 deg.
Measuring accuracy	Distance : less than +/- 1m Speed : +/-1cm/sec
Display	15inch LCD display at System console / LED display at Berth side display
Indicating interval	1 ~ 60 sec (selectable by every 1 sec)
Printing items	Distance, Speed, Date, Time, Print Script of LCD
Output (option)	RS232C or RS422
Speed Alarm	Max 99cm/sec (selectable by every 1 cm/sec)
Ripping Alarm	Max 9.9m (selectable by every 0.1m)
Power supply	AC100V 50/60Hz
Power consumption	Less than 350VA including 2 x Laser sensor (12VA), Berth side display (12VA)
Laser emission	Safety Class 1 (JIS C 6802)

Dimension

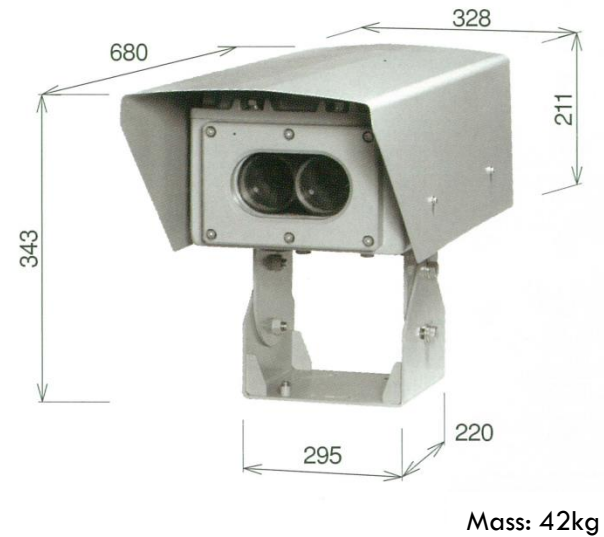
Measurement system

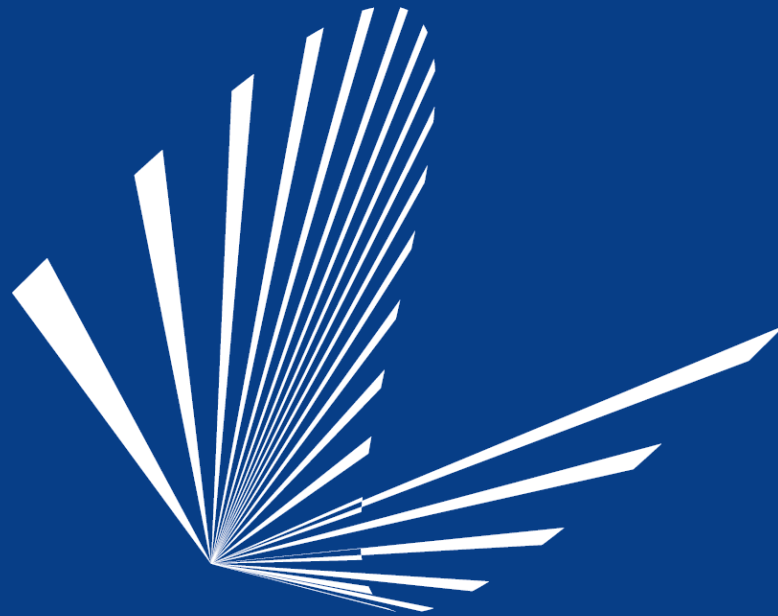


Berth-side Display



Laser sensor





**intelligent
DIGITAL**

Presented by

First manufacturer of ultrasonic flowmeter among the world.

TOKYO
KEIKI
TOKYO KEIKI INC.