



# LNG

## Fuel Tank Monitoring System



**MUSASINO CO., LTD.**

Head Office  
1-2-15 MinamiYukigaya, Ota-Ku, Tokyo, 145-0066  
Tel. +81-3-3726-4413 Fax +81-3-3726-1957  
E-mail: [sales@musasino.co.jp](mailto:sales@musasino.co.jp) / [service1@musasino.co.jp](mailto:service1@musasino.co.jp)  
<http://www.musasino.biz>

Distributor:

**MUSASINO CO., LTD.**

# Musasino LNG Fuel Tank Monitoring System

## (LNG Fuel Tank)

Building on the experience of Musasino CTMS, we have developed a radar type level gauge using a one-inch pipe for gas fuel monitoring systems.

Musasino offers a new, high accuracy and high performance level gauge for LNG fuel at a competitive price to help meet tightening environmental regulations.

Musasino LNG Fuel Tank Monitoring System's configuration complies with IGF rules.

## Easy-to-Maintain All-in-One Structure

The level gauge, temperature gauge (max. 6 points), and pressure gauge are built-in to the same housing.

The compact size saves space.

Each measurement unit is separate inside the electrical housing, enabling easy maintenance without having to open the tank.

The usage of a 1-inch guide pipe, with such light weight reduces the burden of outfitting works.

## The self-correction function provides stable operation over the long-term

Developed from Musasino's extensive experience in marine use radar type level gauges and technical experience, this one-inch pipe radar type level gauge includes a self-calibration function.

Measurements are automatically calibrated for temperature variations.

It is possible to maintain operation with high accuracy and stable level measurement.

## High accuracy trim and heel indicator enables measuring liquid quantity measurement

The digital trim and heel indicator, measures the inclination angle using a capacitive MEMS sensor, and process it digitally to calculate the stable true inclination angle.



### Level Gauge

Application	: LNG
Measurement Method	: Frequency Modulated Continuous Wave (FMCW) Radar
Measurement Range	: 0.5m ~ 25m
Accuracy	: ±5mm
Intrinsically Safe Standard	: Intrinsically Safe Explosion-proof Type Ex Ia IIO T6
Protection Class	: IP66

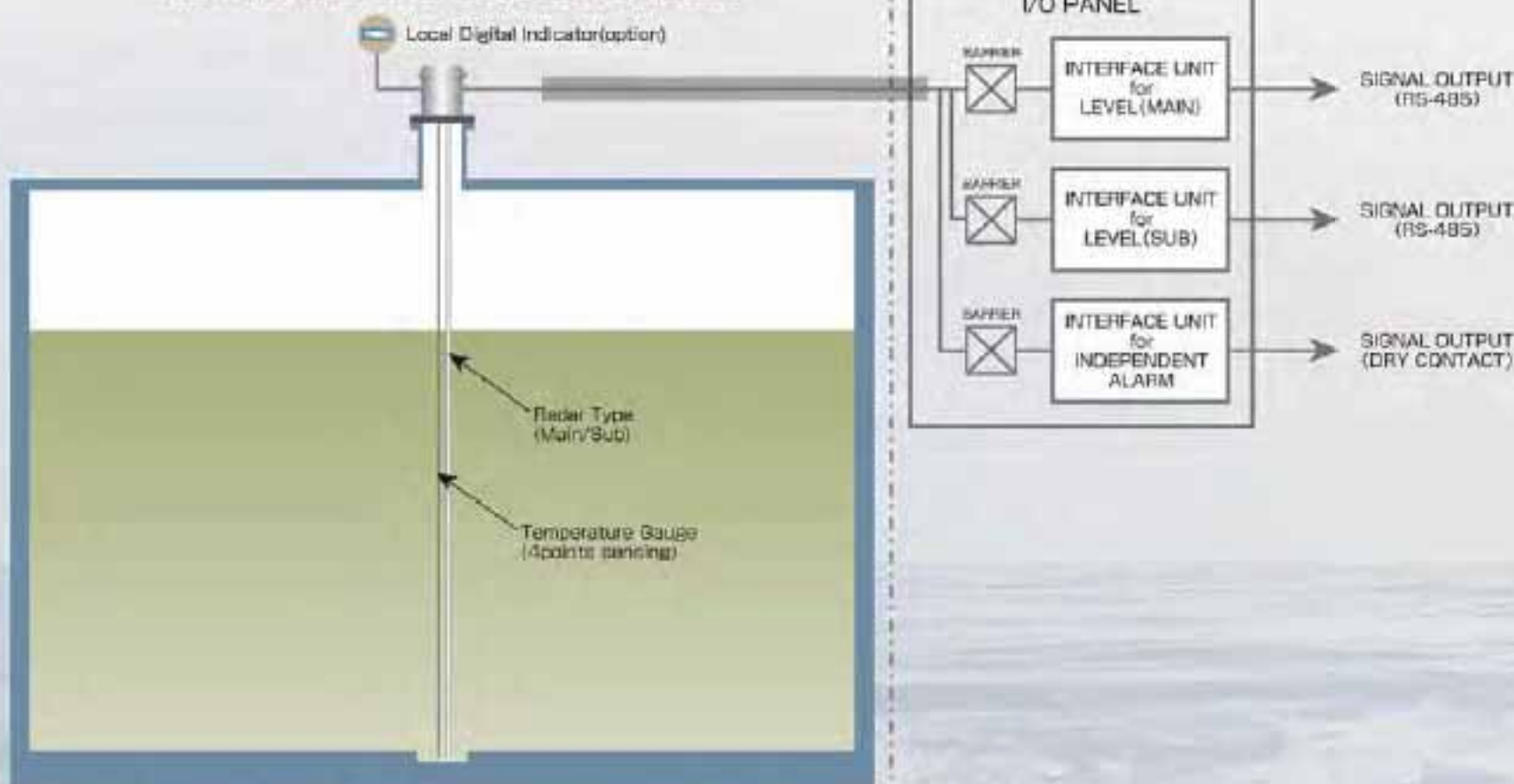
### Temperature Sensor

Measurement Method	: PT-100
Measurement Range	: -163 ~ 100°C
Accuracy	: ±0.6°C

### Pressure Sensor

Measurement Method	: Strain Gauge Type Diaphragm Pressure Gauge
Measurement Range	: 0 bar to 6 bar
Accuracy	: ±1.0%FS

1-inch Pipe Radar Level Gauge Deck Equipment



		150A Type	125A Type	80A Type
Built-in Device( Max.)		- Level Gauge x 2 (Main/Sub) - Temp. Gauge (Max. 6 pts) - Press. Gauge x 1 - Independent Alarm x 1 (1 point sensing)	- Level Gauge x 2 (Main/Sub) - Temp. Gauge (Max. 6 pts.) - Press. Gauge x 1	- Level Gauge x 1 or Independent Alarm x 1 (1 point sensing) - Press. Gauge x 1
Flange	Standard Press. Tight	JIS or ANSI or Class certified flange 5K or 10K		
Material	Terminal box Flange Guide pipe	SUS304 or SUS316L SUS304 or SUS316L SUS304 ( 1-inch Pipe)		
				