

MODEL 6753

Radar Level Sensor

- Non-Contact
- Continuous Measurement
- Accurate, Reliable Operation
- Easy Installation



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BENEFITS:

- Non-contact measurement means less likelihood of losing your sensor to debris and silting conditions.
- HistoROM data management concept for fast and easy maintenance and diagnostics.
- Have the highest reliability even in the presence of obstructions in the water due to new Multi-Echo Tracking evaluation.
- Seamless integration into ALERT/ALERT2 management systems.

DESCRIPTION:

The Model 6753 Radar Level Sensor is a 'downward-looking' measuring system. It measures the distance from the transmitter to the water's surface. Radar impulses are emitted by an antenna, reflected off the water surface and received again by the radar system.

Traditionally, ultrasonic devices have been the preferred level measurement technique in many stream monitoring applications where budget restrictions are tight. And while ultrasonic level measurement indeed provides a low-cost solution, it can however, suffer from problems of echo loss and poor temperature compensation. The 6753 offers an accurate and reliable alternative to ultrasonics.

The Model 6753, has even more intelligent and reliable signal analysis with its Multi-Echo Tracking technology. All of the echo signals are marked and tracked, not only the level signal. Thanks to the new analysis, the level signal is also acquired if it is partly covered by baffles and/or debris. This guarantees safe and precise measurements at any time.

Model 6753's HistoROM data management function allows fast and easy maintenance and diagnostics. As well as continuously backing-up all relevant data, it allows you to replace your instrument module quickly and simply by installing it into the housing. The HistoROM function automatically uploads the configuration to the new module. HistoROM also offers intuitive and user-friendly menu guidance to cut the cost of training, maintenance, and operation.

The 6753 provides non-contact continuous measurement. The sensor has a measuring range of approximately 98 ft (30 m) and has a display for simple menu-guided operation. Configuration software is included with the sensor. NOTE: The 6753 can be freely mounted outdoors – operation is completely harmless to humans and animals.

02-6753-00(B)

Environmental Monitoring Solutions

WEB SITE: www.highsierraelectronics.com E-MAIL: sales@highsierraelectronics.com

Model 6753 Radar Level Sensor

SPECIFICATIONS:

Range	Approximately 98 feet (30 meters)
Accuracy	± 0.12 in (± 2 mm) to $\pm -0.03\%$
Signal Output	2-wire: 4-20mA HART
Beam Angle	10 Degrees
Power Requirements	10.4 to 35 V (For ambient temperatures $T_a \leq -4$ °F (-20 °C) a minimum voltage of 15 V is required for the startup of the device at the MIN error current (3.6 mA). The startup current can be parametrized. If the device is operated with a fixed current $I \geq 5.5$ mA (HART multi-drop mode), a voltage of $U \geq 10.4$ V is sufficient throughout the entire range of ambient temperatures.
Operating Frequency	26 Ghz
Display Operation	SD02 4-line, push buttons + data backup function
Electrical Connection	Thread NPT 1/2
Process Connection	UNI slip on flange 3 in/DN80/80, PP max 4 bar abs/58 psia, suitable for NPS 3 in CI. 150/DN80 PN16/10K 80
Antenna	Horn 3 in (80 mm), PP clad
Housing	GT20 Dual compartment, Aluminum, coated
Enclosure Rating	NEMA 4X/6P
Environmental Protection	IP 66/68
Operating Temperature	-40° to 176°F (-40° to 80°C)
Dimension	5.5 x 11 in (13.97 x 27.94 cm)
Weight	5.5 lbs (2.49 kg)
Shipping Weight	9 lbs (4.08 kg)
Approval	Non-Hazardous area

ORDERING GUIDE:

Model 6753-00	Radar Level Sensor; Default Range 0 to 40.95 ft (12.48 meters). Included 6725-03 Signal Converter/Power Supply and 6 ft. signal cable. Maximum Range 98 ft. (30 meters)
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OPTIONS/SPARE PARTS:

Model 6753-03	Mounting Enclosure; (FMR Radar Sensor) (14 x 14 x 12 in), (35.56 x 35.56 x 30.48 cm) w/Hinged Cover & Key Lock. Powder coated white color.
Model 6753-04	Radar Water-Level Sensor Mounting Enclosure; 18 x 22 x 24 in (45.72 x 55.88 x 60.96 cm) Includes: Powder Coat White Finish w/Hinged Cover, Key Lock, & 8.5 ft (2.6 meters) Antenna Mast.
Model 6725-03	Signal Converter & Power Supply; Converts 12 V to 24 V & 4-20 mA to 0-5 V
Model 5101-00	Extra Signal Cable, 3 Conductor. In foot increments.

See www.highsierraelectronics.com for more specification and ordering information.

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