

Electronic Sensors, Inc.

9146 Diver_® RF – Wireless Submersible Differential Pressure Level Sensing System

DESCRIPTION

he *Level Devil*[®] 9146 **Diver**[®] **RF** is a state-of-theart integrated differential pressure gauge and RF (radio frequency) transmitter. The level of a single, liquid storage tank is transmitted to a local receiver by a RF data link. A pressure gauge at the bottom of the tank connects to a battery powered or solar powered RF transmitter attached to the top of the tank. This transmitter then relays level data to a receiver connected to an analog phone line. The differential pressure gauge is vented into the top of the tank and can accurately report the level when the tank is pressurized.

OPERATION

nstallation of the 9146 **Diver RF** is simple and inexpensive. The **Diver RF** probe is lowered through a tank's top opening to rest on the bottom. The transmitter threads into a 2 inch NPT tank opening. Compared with the 9145 **Diver RF**, the rugged construction of the 9146 sensor provides increased accuracy and temperature range. The sensor is suitable for use in a broader range of products.

SPECIFICATIONS

Tank Hardware

Operating Temperature: -20°F to 185°F

Temperature Compensation: -40°F to 176°F

Range: 5 psi/11.5 foot water column, 8 feet cable length 5 psi/11.5 foot water column, 15 feet cable length 10 psi/23.1 foot water column, 25 feet cable length 25 psi/57.7 foot water column, 35 feet cable length 25 psi/57.7 foot water column, 50 feet cable length

Weight: 5.0 lbs.

Maximum Tank Pressure: 10 psi

Mounting: Sensor rests on bottom of tank; Transmitter screws into 2 inch NPT

Exposed Material: Stainless steel, aluminum, nylon, Vitron (R), nitrile (Buna-N) rubber

Accuracy: 1% within compensated temperature range

Power Source: Solar cell (S) Lithium battery (B) - up to 3 years life

Warranty: 1 year

Receiver

Monitoring Capacity: 4 tanks (-RM4) 6 tanks (-RM6) 30 tanks (-RM30)

Phone Line Modes: Answer or call out Maximum Distance from Transmitter: 1500 Feet Operating Temperature: -20°F to 140°F Input Power: 120 VAC, 60 Hz Mounting: Indoor only, wall hanging or desktop Weight: 1.0 lbs. Warranty: 1 year



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HOW TO ORDER

9146T5S8 — 5 psi/11.5 foot water column pressure sensor, solar powered, with 8 foot cable. **9146T5B8** — 5 psi/11.5 foot water column pressure

sensor, battery powered, with 8 foot cable.

9146T5S15 — 5 psi/11.5 foot water column pressure sensor, solar powered, with 15 foot cable. **9146T5B15** — 5 psi/11.5 foot water column pressure sensor, battery powered, with 15 foot cable.

9146T10S25 — 10 psi/23.1 foot water column pressure sensor, solar powered, with 25 foot cable.

9146T10B25 — 10 psi/23.1 foot water column pressure sensor, battery powered, with 25 foot cable.

9146T25S35 — 25 psi/57.7 foot water column pressure sensor, solar powered, with 35 foot cable. **9146T25B35** — 25 psi/57.7 foot water column pressure

sensor, battery powered, with 35 foot cable.

9146T25S50 — 25 psi/57.7 foot water column pressure sensor, solar powered, with 50 foot cable. **9146T25B50** — 25 psi/57.7 foot water column pressure sensor, battery powered, with 50 foot cable.



9140-RM4-AC — Receiver for up to 4 tanks, AC powered, with modem.

9140-RM6-AC — Receiver for up to 6 tanks, AC powered, with modem.

9140-RM30-AC — Receiver for up to 30 tanks, AC powered, with modem.

SUPPORTING SOFTWARE

Level Devil_® Software See separate specification sheet.

