**Guided Wave Radar Transmitter for Liquids**

**Low Cost, Analog & Switch Output**

The Series GWL Guided Wave Radar Transmitter for Liquids is a level transmitter providing continuous level indication of liquids. The sensor can output level indication as a continuous measurement reading through its 4 to 20 mA analog output, or it can alter that information into freely adjustable (NC) switching output signals. State-of-the-art Time Domain Reflectometry technology in this transmitter makes for excellent accuracy and stability. Suppression of disturbance signals allows the GWL to measure precisely even when operating close to interfering structures. This series is available with either a rigid or flexible probe depending on the application installation required, as well as a custom probe length. One of the GWL characteristics is virtually no installation restrictions making it ideal for small tanks, tall and narrow nozzles, and various other types of processing and storage applications. The guided wave radar transmitter for liquids features exceptional performance in liquids with low reflectivity such as oils and hydrocarbons, and factory settings can be configured via HART® Communication protocol.

**FEATURES**
- Precise continuous level measurement and reliable point level detection.
- Disturbance signal suppression.
- Simple installation.
- HART® Communication protocol.
- Economical.
- No density or conductivity restrictions.
- Zero and full span adjustable within measuring range (length minus the top and bottom dead bands).

**METHOD OF OPERATION**

The GWL senses low-energy, high-frequency electromagnetic impulses, produced by the sensor which are transmitted along the probe immersed in the fluid to be measured. When these impulses hit the surface of the liquid, part of the impulse energy is reflected back up the probe to the sensor which then utilizes the time measured. When these impulses hit the surface of the liquid, part of the impulse energy is reflected back up the probe to the sensor which then utilizes the time measured. The GWL senses low-energy, high-frequency electromagnetic impulses, produced by the sensor which are transmitted along the probe immersed in the fluid to be measured. When these impulses hit the surface of the liquid, part of the impulse energy is reflected back up the probe to the sensor which then utilizes the time measured.

**DIFFERENCES BETWEEN THE IMPULSES SENT AND THE IMPULSES REFLECTED TO DETERMINE THE FLUID LEVEL.**

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