



TDR (time domain reflectometry) is sometimes called 'radar on a rope' or guided wave radar (GWR). Its contact-based measurement principle makes it ideal for reliable product monitoring for solids and liquids. This level measurement technology is immune to dust, vacuum, humidity, foam, and variations in pressure, dielectric and temperature. The Hycontrol Reflex VF7 type GWR is suitable for interface measurements with liquids of different dielectric constant parameters.

The GWR is installed on top of the tank. A probe or cable is lowered into the vessel from the top and continuously measures the level of the product as it makes contact along its length. A microwave signal is transmitted from top to bottom and reflected back. The distance is calculated by the speed of light and the time delay.



**The Reflex VF2 Series range of TDR guided microwave products is ideal for the measurement of liquids, powders and granules to a distance of 40 metres**

- Remote display
- SIL 2 safety level
- Integral display and programmer
- Corrosion-resistant



**Hycontrol's new Reflex VF04 TDR measuring probe measures liquids and solids up to a maximum range of 24m with an accuracy of +/- 5 mm**

- High-temperature option up to 200°C
- High accuracy +/- 5 mm
- 4-20 mA & HART output
- Rod, cable or coaxial probes



**The Reflex VF7 TDR microwave level control transmitter is ideal for the measurement of liquids, powders and granules up to a range of 35 m**

- Corrosion & chemical resistant
- Capable of measuring 1.1 Dk interface
- High-pressure options up to 300 bar
- Safety integrity level SIL1