

Non Contact Radar



Hycontrol non-contact level measurement gauges are immune to dust, vacuum, humidity, foam, and variations in pressure, dielectric and temperature. Hycontrol's 24 GHz and 80 GHz radar products offer a wide range of solutions for solids, powders, dust as well as liquids in hygienic, sanitary, corrosive, chemical and Petro-chemical environments.

Non-Contact Radar instruments are top-mounted. They measure the level by transmitting microwave signals at the speed of time from the antenna to the the surface and back. The elapsed time is calculated into distance or volume. Compared to Guided Wave Radars they have little or no interference with tank obstruction, agitators, aggressive, adhesive, abrasive, high viscosity and temperature process media.



Solids

The RC Series provides continuous, non-contact level measurement of stones, granules, flakes and other such solid products for a variety of industries. It makes an ideal solid level indicator for large or high bins and silos. The level transmitter can be equipped with a metallic horn antenna or PP and PTFE drop antennas. The drop antenna design minimises product build-up and is unaffected by the angle of repose, eliminating the need for antenna aiming kits or purging systems.



Powder and dust

The RD series is made for demanding applications with powders in very dusty atmospheres. With its small beam angle, this radar indicator is particularly suited for continuous, non-contact level measurement in high and narrow silos, hoppers or buffer storage containers up to 100 m/328 ft. Due to the high signal dynamics of the FMCW radar, the level transmitter is ideal for low-reflective media, dust, uneven surfaces or complex silo internal structures. As it features a flush-mounted PEEK Lens antenna, there is no intrusion of the antenna into the silo, bin or hopper. It is ideal for dusty products such as cement, fly ash or GGBS. No calibration is needed.



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PIC Engineering & Services

Hygienic Liquids for F&B and Pharma

Hycontrol's Reflex RA Series two-wire 80 GHz FMCW radar level transmitter is for hygienic liquids applications, where high precision is essential. It provides users in industries such as biochemical and food production with continuous, non-contact liquid level measurement. A flush-mounted PEEK lens antenna with a small beam angle and short dead zone allows for precise level measurement even in small and narrow tanks with agitators.



Chemical, Petro-Chem. Liquids, Oil & Gas

The RB Series is particularly appropriate for continuous, non-contact level measurement in industries such as chemical, petrochemical, and oil and gas. Options include metallic horn antennas or PP drop antennas for condensing atmospheres and corrosive media. The 24 GHz radar has a high dynamic range and can measure distances up to 100 m/328 ft. The configuration is simple, allowing for quick installations.



Corrosive Liquids

Hycontrol's RE Series is ideal for measuring the distance, level and volume of corrosive fluids in agitated tanks up to a range of 100 m/328 ft. The unique drop-shaped antenna option is ideally suited for aggressive liquids, acids and other corrosive substances. For toxic and dangerous liquid products, choose to have the probe equipped with a Metaglas® second sealing barrier. Metaglas® provides the highest possible level of protection for sensitive equipment working in extreme environments.



Narrow Liquid Tanks

The RF Series suits challenging liquid level applications involving narrow tanks with long nozzles and internal obstructions such as agitators, ladders or heating coils. The minimal beam angle and dead zone make this an optimal choice for continuous, non-contact level measurement in both very small and very high tanks (up to 100 m/328 ft) with fast changing levels. This level transmitter can also measure through tank roofs made of non-conductive materials.



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