

Tanks Level Process Radar FMR6x

The FMR6x is a Tank Level Process Radar for liquid and solid applications. The FMR6x operates at about 80 GHz (E-band) and uses a dielectric lens antenna with 50mm, 80mm, $\frac{3}{4}$ " or 1.5" diameter. The antenna is fed from the RF-module through a waveguide including a zone separation. The RF-module is assembled with a waveguide coupler including the galvanic isolation to the antenna. The Sensormodule generates the frequency sweep, samples the IF-signal and does the signal processing up to the level value. It is connected with the Mainboard. The Mainboard gets the distance information, converts it into custom units and shows it on the display, e.g. Furthermore, the custom values are converted into a digital current value in the range of 4...20mA. An analog current output is realized on the I/O Module which also supports the Device with power. The I/O Module is the interface to external control and display units.

