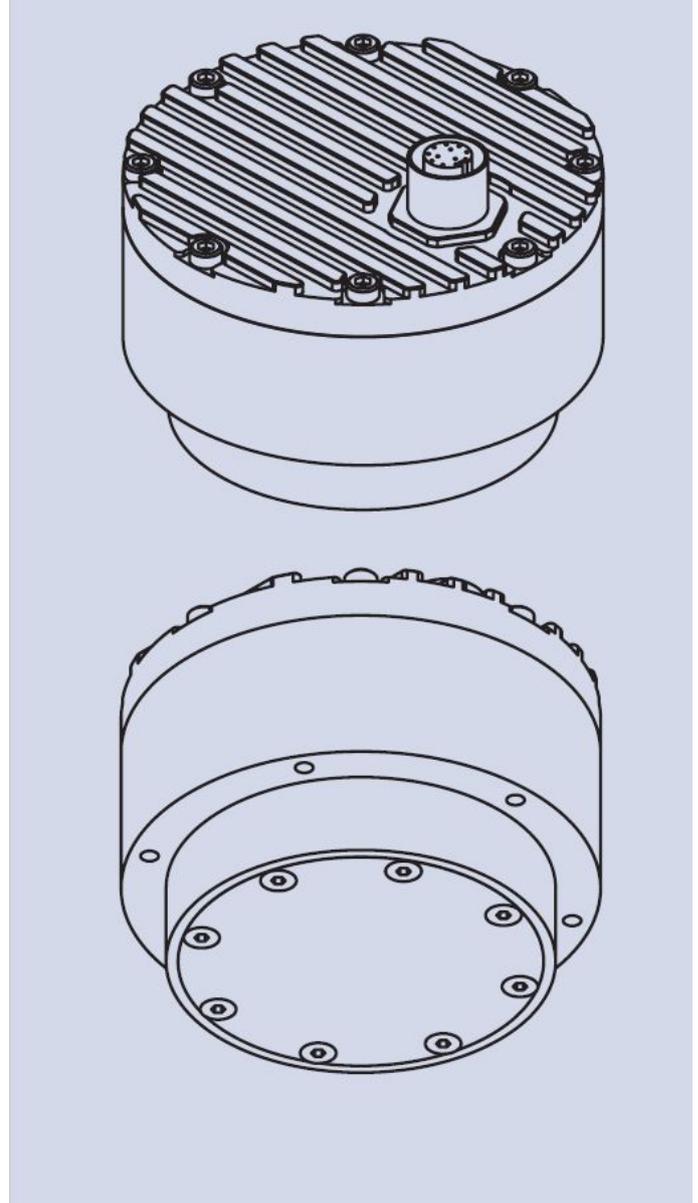


LX-80-35 Level Sensor

Radar Level Sensor for Water and Snow Level Monitoring

LX-80-35 is an advanced level sensor that measures the distance from the sensor to the surface. LX-80-35 uses advanced 80 GHz radar technology to provide accurate and stable measurements.



**Detection distance
35 m**



**Measurement quality
not affected by changes
in air temperature or
density**



**Simple installation and
easy mounting**



**Low power
consumption**

Using contactless technology for the measurement of the level of fluids and solids provides many advantages over traditional methods due to simple installation, low power consumption, and minimal to none maintenance. LX-80-35 can be used for hydrological measurements of open-channels, for snow level measurement, for industrial measurements of fluid levels

in tanks and for measurements of level for various solids in industrial and environmental applications.

The sensor can be also used for measurement of distances of actuators or moving and static machinery parts for control or monitoring purposes in the industrial environment.

LX-80-35 was designed for easy integration in existing environmental and industrial monitoring systems. Low power consumption, multiple supported communication interfaces, and compatibility with MicroStep-MIS data logger and real-

time remote monitoring software all allow our customers to quickly and effortlessly integrate LX-80-35 into new or existing applications.

When compared to ultrasonic sensors for level measurement, radar technology provides an advantage in precision, as

the changes in air temperature which affect the quality of ultrasound measurements do not affect radar measurements. Software radio-defined (SDR) design of the sensor allows easy upgrades, integration of advanced logic and detection possibilities, and simple customization for each specific measurement problem and process.

Technical specifications

Radar type	W-band 77-81 GHz FMCW radar
Beam angle	12° both axes
Detection distance	35 m
Blind zone	0.2 m
Resolution	0.5 mm
Accuracy	±2 mm
Sampling frequency	1 sps / 10 sps optional
IP rating	IP 68
Serial interface	1x serial RS-485 half-duplex 1x serial RS-232 (two wire interface)
Serial baud rate	1200 bps to 115200 bps
Serial protocols	Modbus, GLX-NMEA
CAN interface	up to 1 Mbps CAN2.0
Analog interface	4 - 20 mA
Other interfaces	SDI-12
Connector	M12 circular 12-pin
Power input	9 to 27V DC
Power consumption	< 2.2 W (typical 1.8 W)
Maximal current	< 400 mA
Temperature range	-40 °C to +85 °C (without heating or coolers)
Enclosure dimensions	65 mm (diameter) x 55 mm (height)