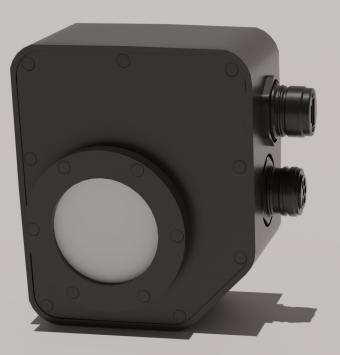


Technical File for Level Sensor Series English language



REAL-TIME LEVEL MEASUREMENTS

Offers precise and reliable level and freeboard measurements for hot metals and slags, enhancing process control in demanding environments

level sensor series

ULTRA ROBUST DESIGN

Built to withstand the rigors of direct exposure above molds, tundishes, or ladles, ensuring durability and consistent performance

PLC COMPATIBILITY

Direct integration with Programmable Logic Controllers (PLCs) via Modbus/TCP for seamless data communication and system coordination

HIGH PERFORMANCE STANDARDS

Maintains high accuracy and low maintenance needs, even in extreme conditions characterized by heat, dust, and molten metal sparks, with a measurement range up to 25,000 mm

MICROMETER ACCURACY & PRECISION

Delivers the highest levels of precision with micrometer accuracy, crucial for optimal metal processing and quality assurance

FULL COMPENSATION FOR DRIFTING EFFECT

By implementing measures to fully compensate for the drifting effect, the results remain constant and stable over time, ensuring reliability and accuracy in the measurements or outputs.

Technical Data

Directly above a mold, tundish or ladle, this ultra-robust sensor accurately measures levels and freeboard reliably in real time.

Measurement principle	FMCW
Centerfrequency, Bandwidth	121.15 GHz ¹ / 122.5 GHz ² 3 GHz, 3 Ghz ¹ / 0,9 GHz ²
Transmitting power (max.)	2mW
Measurement rate	75 Hz
Object detection time/ Release time	40 ms default
Opening angle	+/- 2°
Operation temperature	-20°C70°C
Flexible distance to target object	from 200 mm up to 25,000 mm ³
Power consumption (typ.)	6 Watt
Interfaces	1x RJ-45 with PoE
Communication	ModbusTCP interface, 2x Relay-contacts
Power supply	*PoE
Housing material	Aluminum alloy or Stainless Steel
Front plate	PTFE ⁴
Certification	FCC ¹ , CE ²
Housing protection	IP68/IP69K
Sensor Dimensions	131 x 130 x 74,5 mm
Sensor Weight	1.500 g ⁵
Mounting	4x M6x1 depth 8 on the backside 2x M6x1 depth 6 on the bottom