

SENSING & CONTROL / RADAR LEVEL TRANSMITTER

Flowline EchoBeam® LR85

80 GHz radar liquid and solids level transmitter — specs sourced directly from Flowline's Data Sheet DS310350 Rev B.

Spec	Value
Max Range	Solids: 196.8 ft (60 m) — dielectric ≥ 6 , minimal dust Liquids: 393.7 ft (120 m) — dielectric ≥ 10 , minimal agitation
Frequency	80 GHz, W-band, FMCW
Accuracy	0.4–30 m: ± 2 mm; 0.00–0.39 m: ± 10 mm
Beam Angle	4°
Minimum Dielectric	≥ 1.6
Signal Output	4–20 mA two-wire with HART, or Modbus RS485 (9600 baud)
Supply Voltage	12–30 VDC (4–20mA/HART); 9–27 VDC (Modbus)
Process Temperature	–40°F to 248°F (–40°C to 120°C)
Pressure	–14.5 to 43.5 psi (–1 to 3 bar) threaded/gimbal-flange models
Enclosure Rating	NEMA 4X (IP66/67)
Antenna Material	PFA (natural perfluoroalkoxy) — rugged corrosion resistance
Wetted Flange Material	316L stainless steel
Configuration	LevelTap™ App (iOS & Android, Bluetooth 5.0, 26.2 ft range) or push button

Vendor-stated performance: 80 GHz technology is unaffected by significant dust, agitation, foam, or low dielectrics — a 4° beam angle suits applications with limited measurement space. An intrinsically safe model is available for liquid applications with a 4–20 mA/HART output (requires an LB12–1001 intrinsic safety barrier).