

ANL-8010, ANL-8010S

Guided Wave Radar Level and interface transmitters

Version V.2024

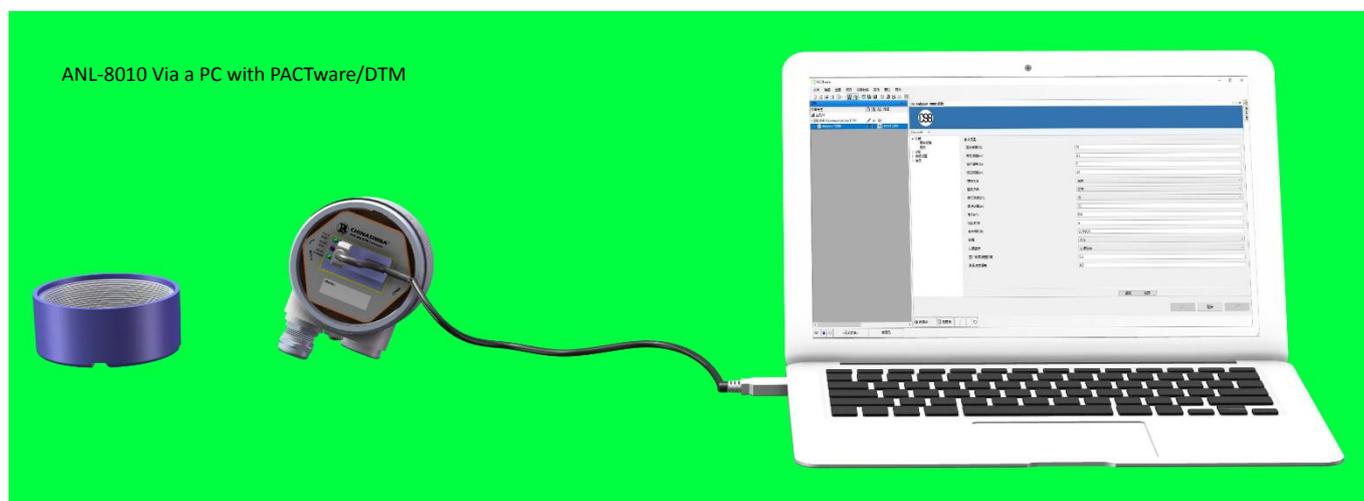
Characteristics

- Level and interface measurement in liquids and bulk solids.
- The user interface of the product can be adjusted through mobile phone.
- Remote parameter setting can be supported without going to on-site.
- Density fluctuations, steam generation or strong pressure and temperature fluctuations do not influence the measuring result.
- Build-up on the probe or the vessel wall do not influence the measurement
- Product adopts innovative multi-echo tracking technology, built-in storage of factory pre-calibration data, reliable measurement under fluctuating liquid levels and foams.
- Product is cost-effective, supports OEM/ODM, electronic modules are available.
- With inside overvoltage protection
- It supports the connection of tank tables to achieve distributed display and debugging



Application

- Typical process properties in bulk solids are strong dust and noise generation, buildup, condensation and of course the generation of material cones. ANL8010 is the ideal measuring system for silos or bunkers with such conditions. Typical product properties, such as moisture content, mixing ratio or granulate size, do not affect the function of the instrument, which makes planning really simple.
- The intelligent software guarantees high measurement certainty and a well monitored probe. An ideal application is level measurement in a bypass tube or standpipe, because even products with a dielectric constant below 1.4 can be reliably measured.
- Even in products with low dielectric constant (from 1.4) the sophisticated processing ensures reliable measuring results.
- Different probes are available: Cable probes for applications in high vessels up to 75m. Rod probes for applications in vessels up to 10m.



Specifications



ANL-8010 - x	Rod	Cable	Coax
Max. measuring range	Max. 10m / Level or Level & Interface	Max. 45m / Level or Level & Interface	Max. 6m / Level or Level & Interface
DK value	DK >1.4	DK >1.6 @ ≤30m, DK >2.0 @ >30m	DK >1.2
Probe	Ø 8 / Ø 10 (default) / Ø 12mm	Ø 2 / Ø 4 / Ø 6mm (default)	Ø 22 / Ø 32(default) / Ø 42mm
Process fitting / Material wetted parts	Thread G½, G1, G1½, NPT/ Flanges ≥ DN25 304L/316L/Alloy C, PEEK / PTFE (default) / PFA	Thread G½, G1, G1½, NPT / Flanges ≥ DN50 304L/316L/Alloy C, PEEK / PTFE (default) / PFA	Thread G½, G1, G1½, NPT / Flanges ≥ DN50 304L/316L/Alloy C, PEEK / PTFE (default) / PFA
Ambient temperature	-40 ... +85 °C / -60 ... +105 °C (cool version)		
Process temperature	-60°C ... +200°C / PEEK, -40°C ... +200°C / PTFE, -195°C ... +260°C / PFA		
Max. process pressure	-1 ... 4MPa	-1 ... 4MPa	-1 ... 4MPa
Measuring accuracy	level: ±2 mm Interface: ±5 mm	level: ±2 mm@≤15M, ±6 mm@>15M Interface: ±8 mm	level: ±1 mm Interface: ±5 mm
Signal output	4-20 mA/HART7 2-wire, 4-20 mA/HART7 4-wire, Profibus PA / DP, Ethernet-APL, Modbus protocol 4-wire		
Variables influencing meas. accuracy	Specifications for the digital measured value Temperature drift - Digital output: ±1mm/10K relating to the max. measuring range or max. 15 mm Additional deviation through electromagnetic interference acc. to EN-61326: < ±10 mm Specifications apply also to the current output Temperature drift - Current output: ±0.01%/10K relating to the 16.7 mA span or max. ±0.15% Deviation in the current output due to digital/analogue conversion Non-Ex and Ex-ia version: < ±1µA; Ex-d-ia version: < ±1µA Additional deviation through electromagnetic interference acc. to EN-61326: < ±150µA		
Indication/Adjustment	1. 160x80 LCD FSTN RGB backlight monitor adapter with keyboard module, operation Temp. -20°C ... 70°C. or 128x64 OLED monitor adapter with keyboard module, operation Temp. -55°C ... 80°C. (option) or 230x240 LCD TFT colors monitor adapter with keyboard module, operation Temp. -20°C ... 70°C. (option only for 4-wire system) 2. (APP) Radar MobileManager via BT wireless connection 3. (PC software) Radar PCManager /or Via a PC with PACTware/DTM (an interface converter AiW-305 USB CONNECT is required)		
Power supply	14.5V ~ 40 VDC / Load resistor > 600Ω		
Wireless communication	Bluetooth 5.0 (Bluetooth 4.0 LE compatible), communication range 40m, in rainy day 20m		
Approvals	Ex ia IIC T6 Ga IP67; Ex d IIC T6 Gb IP67		
Housing	Single chamber / Double chamber, Aluminum / Stainless steel / Plastic PBT, IP66 / IP67 / IP68		
Applications	Storage silos, storage tanks, liquids with smooth surface	Storage tanks, liquids with agitated surface, high storage silos, silos with product movement	Storage tanks, liquids with low dielectric constant, vessel with installations

SERVICE CONTACT: 86-13799977915, 86-18965063391(TECHNICAL SUPPORT), 86-18106067295(AFTER SALE SERVICE)
 ALTHOUGH WE HAVE RECONCILED THE CONTENTS OF THE MANUAL WITH DESCRIPTION OF INSTRUMENT, THERE MAY STILL BE CHANGES WE CANNOT ENSURE THAT IT IS FULLY CONSISTENT. THE CONTENT WILL BE CHECKED AND CORRECTED IN AN ORDERLY, AND THE ERRATA WILL BE IN SUBSEQUENT RELEASES. WE WELCOME USERS TO MAKE VARIOUS SUGGESTIONS FOR IMPROVEMENT. [TECHNICAL DATA SUBJECT TO CHANGE]

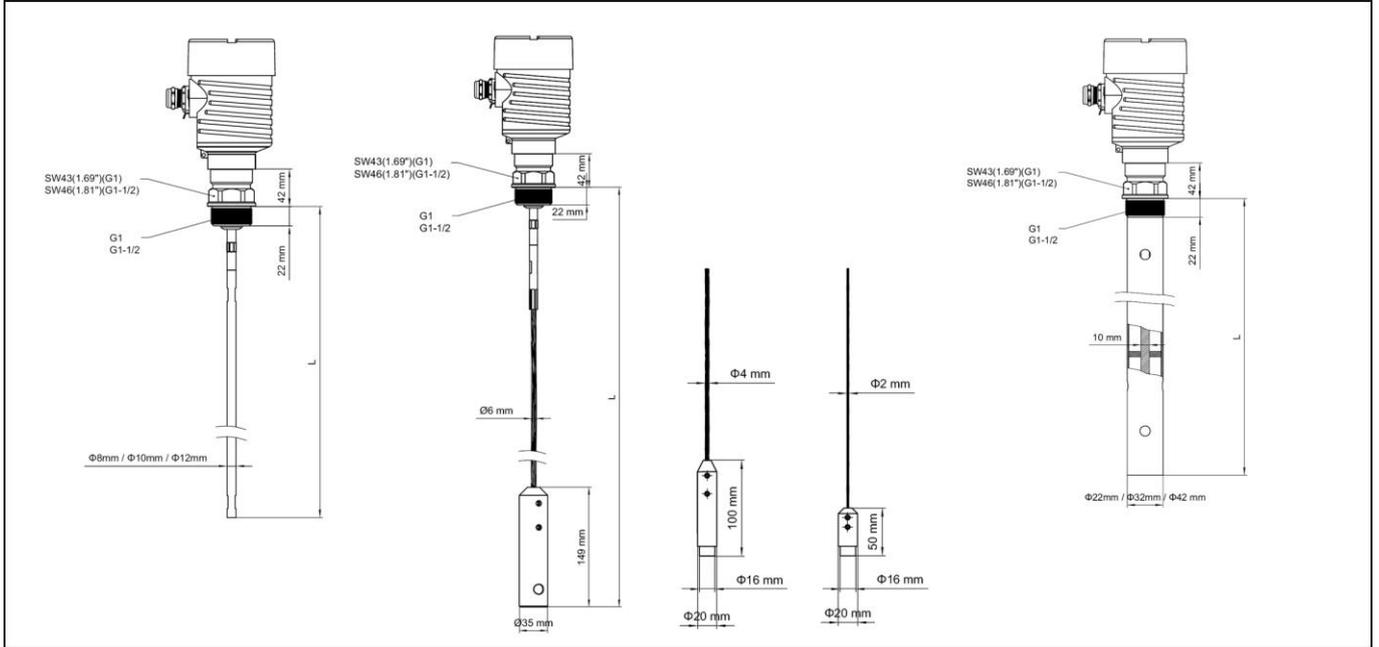


ANL-8010S - x	Rod	Cable	Coax
Max. measuring range	Max. 10m / Level or Level & Interface	Max. 45m / Level or Level & Interface	Max. 6m / Level or Level & Interface
DK value	DK >1.4	DK >1.6 @ ≤30m, DK >2.0 @ >30m	DK >1.2
Probe	Ø 8 / Ø 10 (default) / Ø 12mm	Ø 2 / Ø 4 / Ø 6mm (default)	Ø 22 / Ø 32(default) / Ø 42mm
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Ambient temperature	-40 ... +85 °C / -60 ... +105 °C (cool version)		
Process temperature	-60°C ... +300°C / PEEK, -40°C ... +300°C / PTFE, -195°C ... +360°C / PFA		
Max. process pressure	-1 ... 4MPa	-1 ... 4MPa	-1 ... 4MPa
Measuring accuracy	level: ±2 mm Interface: ±5 mm	level: ±2 mm@≤15M, ±6 mm@>15M Interface: ±8 mm	level: ±1 mm Interface: ±5 mm
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Indication/Adjustment	1. 160x80 LCD green backlight monitor adapter with keyboard module, operation Temp. -20°C ...70°C. or 128x64 OLED monitor adapter with keyboard module, operation Temp. -55°C ... 80°C. (option) or 230x240 LCD TFT colors monitor adapter with keyboard module, operation Temp. -20°C ... 70°C. (option only for 4-wrie system) 2. (APP) Radar MobileManager via BT wireless connection 3. (PC software) Radar PCManager /or (an interface converter AiW-305 USB CONNECT is required)		
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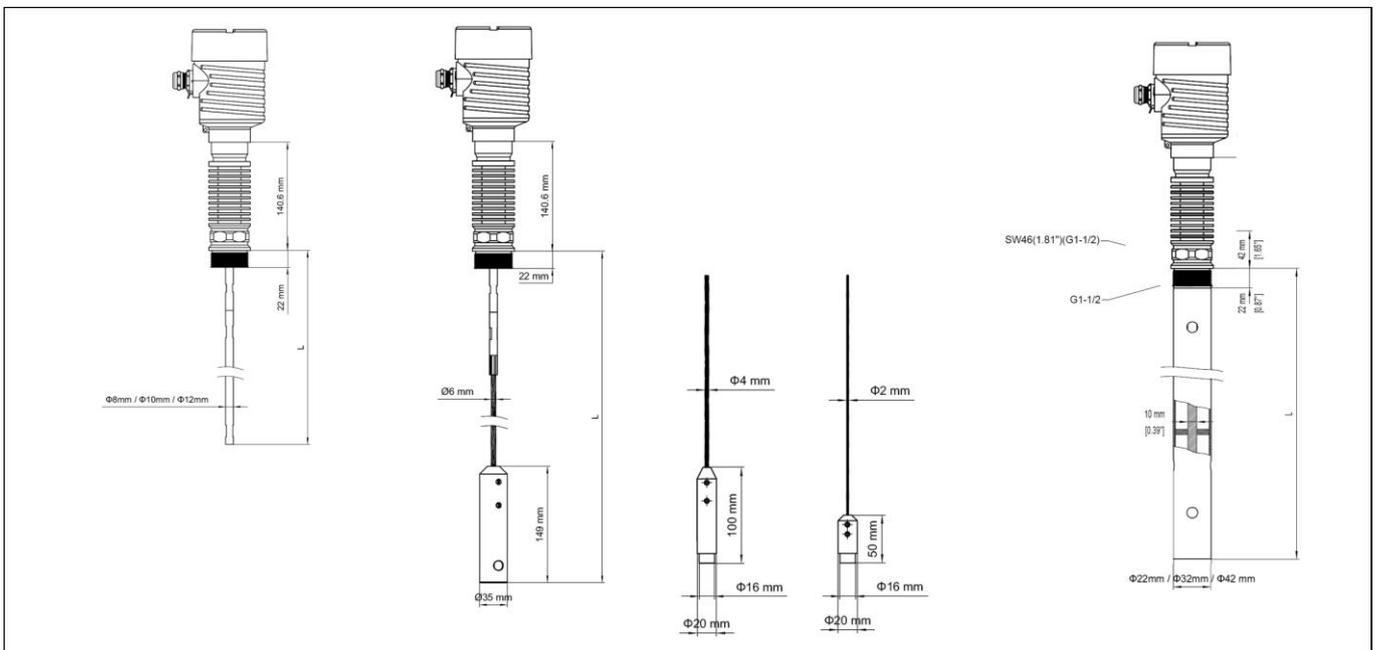
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Dimensions

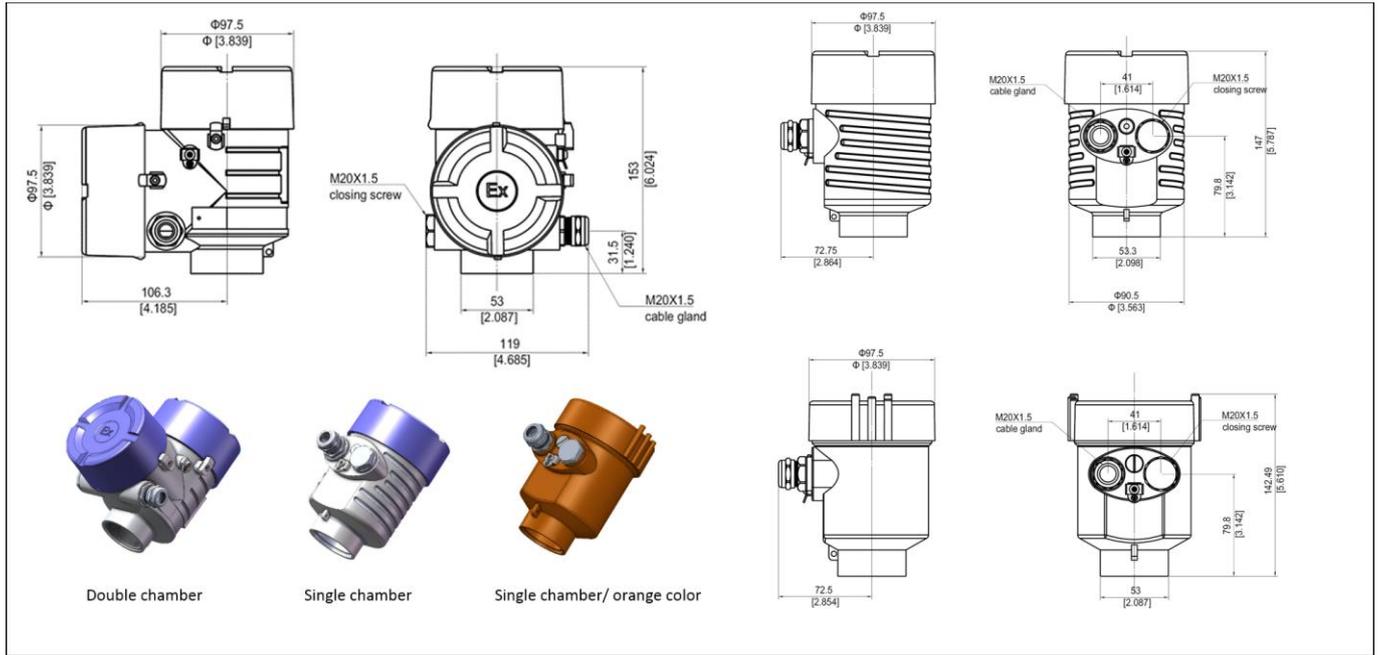
ANL-8010 Rod/Cable/Coax version



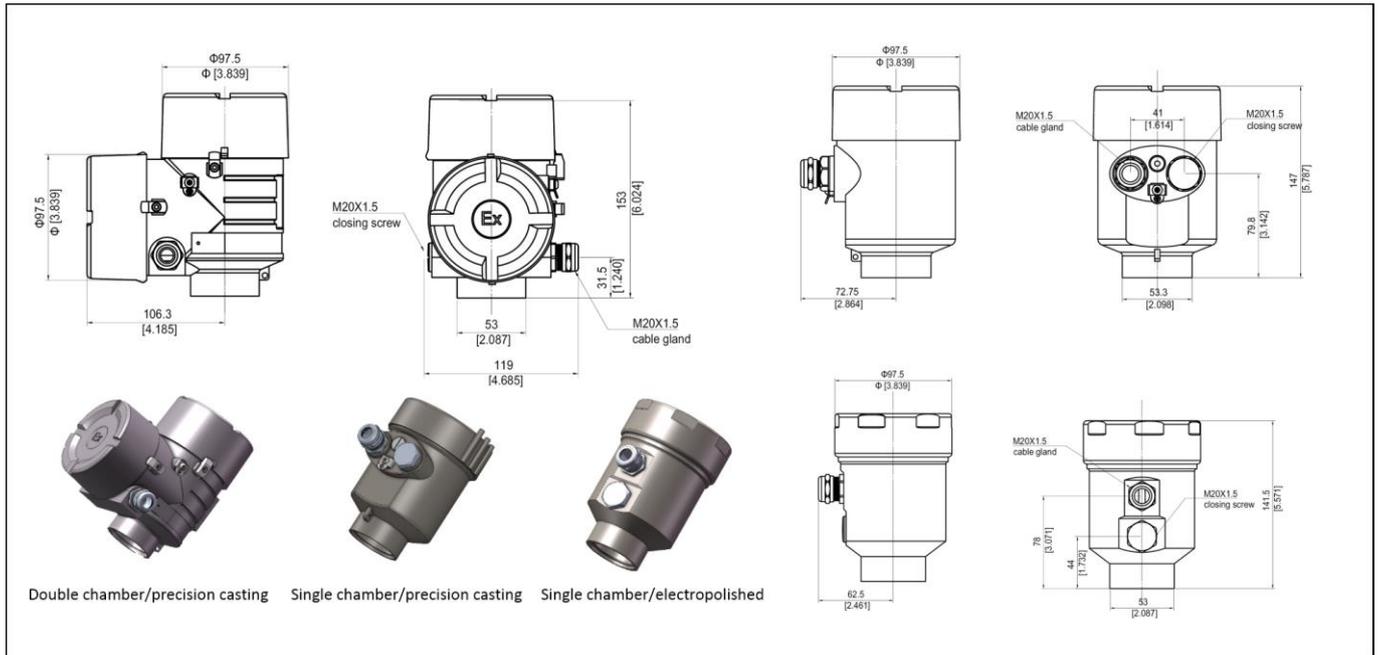
ANL-8010S Rod/Cable/Coax version



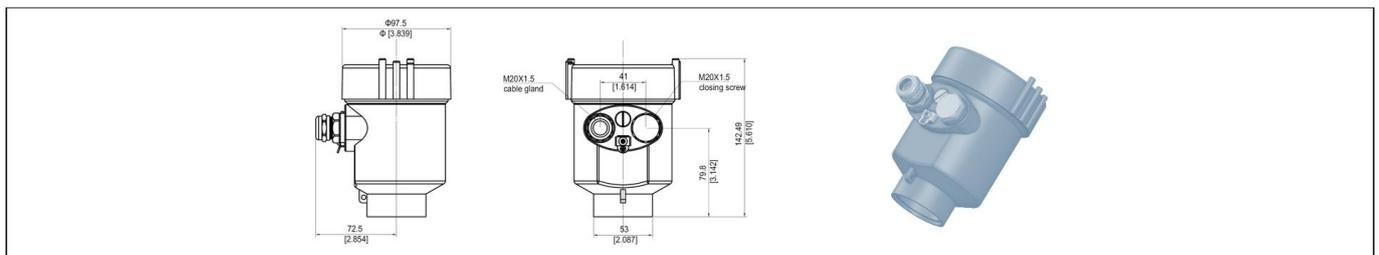
Aluminum housing



Stainless steel housing



Plastic housing



Indication/Adjustment Adapter

<p>160x80 LCD RGB Backlight Monitor Adapter</p>			
<p>128x64 OLED graphic Monitor Adapter</p>			
<p>320x240 LCD TFT colors Monitor Adapter</p>			

For more information contact your regional sales representative.

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