

GLT745



PRODUCT OVERVIEW

The GLT745 Series products are non-contact radar level meters that use advanced millimeter-wave radar technology to provide accurate and reliable measurements. They support flexible power supply options and various communication modes for easy setup and integration. Thanks to the ultra-high operating frequency (76-81GHz), extremely narrow beam angle, and strong interference immunity, these instruments deliver precise level measurement for liquids, slurries, granules, powders, and solid materials. They perform reliably even in tough conditions—such as high temperature, high pressure, heavy dust, steam, or corrosive environments. Ideal for a wide range of industrial applications, the GLT745 Series products also enable safe and convenient on-site configuration and remote maintenance via Bluetooth wireless technology and multiple wired communication interfaces.

MAIN FEATURES

- **High-Precision Measurement:** Utilizing FMCW millimeter-wave radar technology and built-in DSP digital signal processor, they automatically compensate for variations in temperature and medium characteristics, achieving millimeter-level accuracy (± 1 mm).
- **Wide Operating Range:** Suitable for a variety of materials including liquids, slurries, granules, powders, solids, and bulk goods. They perform reliably under complex conditions such as high temperature, high pressure, heavy dust, steam, and corrosive environments.
- **Strong Anti-Interference:** Equipped with an extremely narrow beam angle and advanced signal processing algorithms, they effectively filter out interfering echoes, ensuring stable and reliable measurements.
- **Easy Configuration and Maintenance:** Support Bluetooth 5.0 wireless commissioning (effective range of 12m) with a mobile app featuring a graphical interface for safe and efficient onsite operation. Also supports multiple wired communication methods for configuration.
- **High Reliability:** Housings made of aluminum alloy or stainless steel with IP66/IP68 protection ratings, suitable for harsh industrial environments.
- **Non-Contact Measurement:** No direct contact with the measured material, making installation and maintenance easier while preventing wear and corrosion caused by the material.
- **Fast Response:** Measurement interval as short as 300 ms, with select modes supporting rapid response to meet dynamic process requirements.

APPLICATION

- Petrochemical industry
- Power Industry
- Metallurgy
- Food & Pharmaceutical
- Environmental Protection
- Tank / Silo Material Monitoring (Liquids, Solids, Powders, Slurries, etc.)
- Level Measurement in Agitated Conditions, Heavy Dust / Condensation Environments

TECHNICAL PARAMETERS

Frequency	76GHz-81GHz
Range	12m 35m 85m 120m
Accuracy	±1mm
Communication method	MODBUS RTU, HART
Output signal	RS-485,4-20mA
Power supply	18-28V DC
Output Fault	No change, 22mA,3.6mA
Display & Control Temperature	-30~70°C
Cable Entry	M20X1.5
Recommended cable	AWG18 or 0.75mm ²
Housing material	Aluminum Alloy, Stainless Steel
Process Temperature	-30~80°, -30~200°
Process pressure	-0.1~1.8MPa
Measurement interval	Min. 300 ms
Max. Power Consumption	4-20mA/HART(20mA),4-20mA 4-wire (70mA)
Beam angle	3°, 8°
Protection grade	IP67/IP68
Mounting Type	Flange, Thread
Antenna Material	PTFE
Antenna Type	Lens
Display / Configuration	128x64 Dot Matrix Screen/4 Buttons,PC Software, Bluetooth
Wireless communication	Bluetooth
Bluetooth range	12m
Bluetooth standard	Bluetooth 5.0
Blind area	80mm
Connection Type	Threaded Type, Universal Type, Standard Corrosion-Resistant Type, High-Temperature Corrosion-Resistant Type
Application Range	Liquids, Agitated Conditions, Condensation, Heavy Dust

PRODUCT INTRODUCTION

GLT7451 Standard Threaded Type



Specification: Corrosion-resistant type	Process interface: Flange
Model: GLT7452	Medium temperature: -30~100°
Frequency: 76~81GHZ	Process pressure: -0.1~0.3MPa
Beam angle: 3°	Accuracy: ±1mm
Range: 120m	Ingress protection: IP67/IP68
Housing material: Die-Cast Aluminum / Stainless Steel	Bluetooth: Optional
Power supply: 18~28VDC	
Output signal: 4~20mA/HART(2-wire/4-wire)RS485/Modbus	
Application: Highly Corrosive Liquids, Agitated Conditions, Condensation	

GLT7452 Standard Corrosion-Resistant Type



Specification: 80G Heat-Dissipating Flush Diaphragm Corrosion-Resistant Type	Process interface: Flange
Model: GLT7453	Medium temperature: -30~200°
Frequency: 76~81GHZ	Process pressure: -0.1~1.8MPa
Beam angle: 3°	Accuracy: ±1mm
Range: 120m	Ingress protection: IP67/IP68
Housing material: Die-Cast Aluminum / Stainless Steel	Bluetooth: Optional
Power supply: 18~28VDC	
Output signal: 4~20mA/HART(2-wire/4-wire)RS485/Modbus	
Application: High-Temperature Environment, Highly Corrosive Liquids, Agitated Conditions, Condensation	

GLT7453 High Temperature Corrosion-resistant Type



Specification: 80G Heat-Dissipating Flush Diaphragm Corrosion-Resistant Type	Process interface: Flange
Model: GLT7453	Medium temperature: -30~200°
Frequency: 76~81GHZ	Process pressure: -0.1~1.8MPa
Beam angle: 3°	Accuracy: ±1mm
Range: 120m	Ingress protection: IP67/IP68
Housing material: Die-Cast Aluminum / Stainless Steel	Bluetooth: Optional
Power supply: 18-28VDC	
Output signal: 4~20mA/HART(2-wire/4-wire)RS485/Modbus	
Application: High-Temperature Environment, Highly Corrosive Liquids, Agitated Conditions, Condensation	

GLT7454 Universal Flange Type



Specification:80G Large Lens Universal Type	Process interface: Universal flange
Model: GLT7454	Medium temperature: -30~80°
Frequency: 76~81GHZ	Process pressure: -0.1~0.3MPa
Beam angle: 3°	Accuracy: ±1mm
Range: 120m	Ingress protection: IP67/IP68
Housing material: Die-Cast Aluminum / Stainless Steel	Bluetooth: Optional
Power supply: 18-28VDC	
Output signal: 4~20mA/HART(2-wire/4-wire)RS485/Modbus	
Application: Heavy Dust, Solids, Bulk Solids, Powder	

ORDERING GUIDE

Code	Instrument specifications						
GLT7451	Standard type						
GLT7452	Anti-corrosion type						
GLT7453	High temperature anti-corrosion type						
GLT7454	Universal flange type						
	Code	Housing/Protection grade					
	L	Die-Cast Aluminum					
	G	Stainless steel/IP67					
	Y	Special requirements					
	Code	Process interface					
	G	Thread G1.5					
	B	Flange DN80 PN16					
	C	Flange DN100 PN16					
	K	Flange DN80 PN16 Universal type					
	Y	Special requirements					
	Code	Electronics Unit					
	2	2-wire (4~20) mA 24VDC/HART					
	3	4-wire (4~20) mA 220V AC					
	4	4-wire RS485 MODBUS-RTU					
	Y	Special requirements					
	Code	Cable entry					
	M	M20*1.5					
	Code	Material type					
	L	Liquids					
	S	Solids					
	D	Dust					
	Code	Range					
	1	(0~30) m					
2	(0~60) m						
3	(0~120) m						
Code	Special agreements						
Y	Special agreements						
GLT7451	L	K	3	M	S	2	Y