

Cross Smart Sensor

UL7 ULTRASONIC LEVEL SENSOR

The **UL7** series sensors are based on the ultrasonic technology that provides a non-contact approach for detecting levels of liquid, slurry and solid granules or chunks. It's a member of Delta-Phase's Cross Smart Sensor family that can work independently with 24VDC power supply and output measured data via RS485/Modbus-RTU protocol. This greatly facilitates the UL7 sensor to be directly connected to all commonly used digital devices like Data logger, PLC, and DCS, etc. as well as for sensor network applications. UL7 is recommended to work with Delta-phase's GDC (General Displayer & Controller) series if a remote monitor is required. UL7 can be calibrated/configured by GDC or by user's computer installed with **Delta-Phase View™ software**.

This versatility makes them deal for a variety of applications. Ultrasonic sensors are not affected by target surface, color or translucency and they function extremely well in harsh environments. When monitoring liquids, they are not affected by changes in dielectric constant, specific gravity or viscosity.


When connect to GDC terminal, it gives real time reading, analog outputs and relays for field control. It also can be used as open channel flow meter if ordered with the OCF software of GDC which has built-in standard flume measuring formulas, such as: Parshall flume, V flume, Venturi flume and Rectangle flume...



FEATURES & BENEFITS

- ◆ Automatic temperature compensation
- ◆ Blind Zone adjustable
- ◆ PVDF Sensor Face for chemically aggressive environments
- ◆ Open Protocol for sensor network applications
- ◆ **Delta-Phase View™ software available**


Conform to the following EU Directives & Standards:

	Low Voltage Directive 2014/35/EU
	Electromagnetic Compatibility Directive 2014/30/EU
	RoHS 2 Directive 2011/65/EU
	EN 61010-1:2010; EN 61326-1:2013

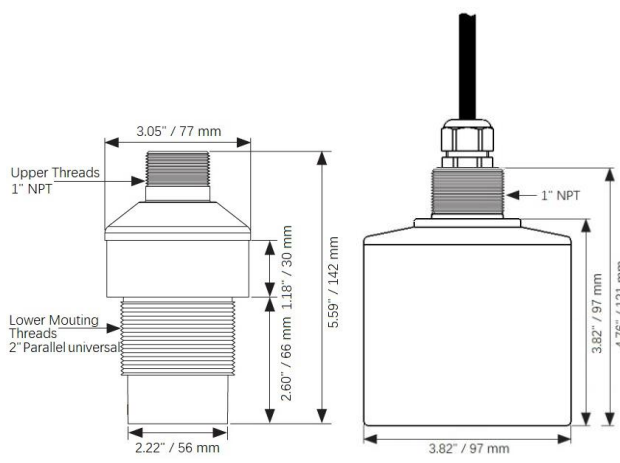
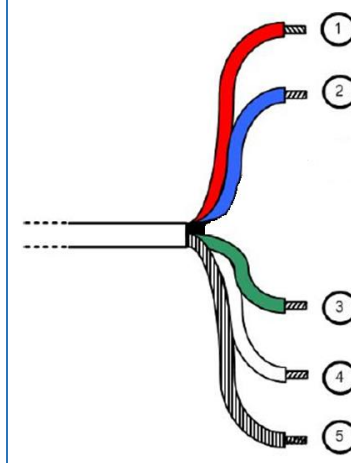


APPLICATIONS

- Water & Waste Water Treat Plant
- Storage Tank Levels
- Effluent pits
- Reservoir Level
- Buffer Tanks
- Open Channel Flow

GDC-01/02 Terminal Single or dual-channels 	GDC-04/06/08 Terminal Multi-channels up to 8 	GDC-H Terminal Handheld Terminal 	GDC-Ex Terminal Single channel Ex-proof 
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SPECIFICATION	
Range	Level: 33ft. (10m) std. Optional 50ft. (15m) or 66ft. (20m) Flow: 0.20 m ³ /h ~ 200.000.00m ³ /h (work with GDC for Open Channel Flow)
Accurate	±0.25%FS
Resolution	0.04 in (1 mm)
Angle	10° ± 2°
Blind Zone	12" (0.3m) @ 33ft.; 14" (0.35m) @ 50ft. & 66ft.
Temp. compensation	Automatic
Respond Time	0.5s
Operate Temp.	-40 to 158°F (-40 to 70°C)
Protection	IP68
Pressure	2bar
Material	PVDF
Process Connection	1" NPT Upper Threads 2" NPT Lower Mounting Threads (UL7-R10 Only)
Cable	Standard 10', Max. 650'
Power Supply	24VDC by GDC or individual power source. Consumption < 6w
Digital Interface	RS485 Modbus RTU
Weight	with 33ft. cable: R10:2.67 lbs. (1.22kg); R15/20: 3.32 lbs. (1.51kg)

DIMENSION	WIRING
	

ORDERING INFORMATION

UL7 Smart Ultrasonic Level Sensor			
	-R	Remote Level Sensor	
		Range	
		10	33' (10 meters)
		15	50' (15 meters)
		20	66' (20 meters)
			-C10 10' cable
			-C20 20' cable
			Max. 650'
UL7	-R	10	-C10

