





High resolution Non contact liquid F500 Ultrasonic fuel level sensor diesel tank level sensor Water level meter for car tank Price: **US** \$105 / piece **Bulk Price** Sorry, this item is no longer available! Click to view more Sensors products You can: Return Policy Returns accepted if product not as described, buyer pays return shipping fee; or keep the product & agree refund with seller. View details ▶ Seller On-time Delivery Guarantees: days Payment: View More **Buyer Protection** Full Refund if you don't receive your order Full or Partial Refund, if the item is not as described Learn More

**Product Details** Feedback (0) Shipping & Payment Seller Guarantees Item specifics is\_customized: Yes Type: Magnetic Sensor Material: Metal Usage: Level Sensor Theory: Ultrasonic Sensor Model Number: F500 Output: analog & digital output Type: F500 ultrasonic level transducer voltage: 9~36V Output: 0-5v/rs232/rs485/4-20ma Resolution: 1mm Material: Stainless steel/ ABS plastic Measuring range: 30-2000mm Explosion Proof Certificate: EXia II C T6 Working Temperature: -20~70 ℃ Installation: Glue fixing no need drill hole Gauge (Charges 30\$): optional for read fuel level **Product Description** Attention: For this type F500 ultrasonic level sensor, the measure range is 2m. And there has different output for you select, which is

0-5v&RS232 and 0-5v&RS485 output. Any questions, you can contact with me on Service Center. Best regards, Rebecca.

## 1 Overview

The DF500 is one type of ultrasonic level sensor which measure the liquid level without drilling hole on container. The resolution is 1mm or 0.1%FS (the bigger value).

It is applicable for the close container or open container which thickness is less than 5mm. Steel tank or plastic are applicable. Output is optional for 0-5V, RS232 and RS485, it is easy to integrate into the embedded system or SCADA.

In order to realize remote monitoring, there are wireless version for DF500, including zigbee, Wifi, GPRS, 3G by working with our wireless module. Furthermore, GPS module is one optional for the DF500.

# 2 Specification

Measurement Range	50~ 2000mm	
Blind Area	50mm	
Resolution	1mm or 0.1%FS, the bigger one	
Accuracy	3mm or 0.3%FS, the bigger one (for stable container)	
Power Supply	9-36V DC	
Current	70mA@12VDC	
Output Signal	RS485, RS232, 0-5V, wireless (optional)	
Protocol	Dingtek /Customized	
Operating Temperature-20~70		
Storage Temperature	-40 ~ 85	
Media	liquid	
Protection Rank	IP66 for transducer, IP65 for the controller box	
Mounting	Surface stick by glue or tape	
LED Display	Optional for installation	
Wireless	Optional for zigbee, wifi, GPRS, UMTS.	
Dimension	Transducer ø30, Controller box 82*55*25mm	

# 3 Interface Definition



### 3.1 RS232 version

Wire	Function	Remark
Red	Power+	9~36VDC
Black (Thick)	GND	Power GND
Yellow	TXD	RS232 Tx
Blue	RXD	RS232 Rx
Green	Analog	Analog output
Black (Thin)	GND	Signal GND

### 3.2 RS485 version

Wire	Function	Remark
Red	Power+	9~36VDC
Black (Thick)	(GND	Power GND
Yellow	В	RS485 B
Blue	Α	RS485 A
Green	Analog	Analog output
Black (Thin)	GND	Signal GND

### 3.3 Wireless version (Zigbee/Wifi/GPRS/3G)

Pin 1: Red Line: V+, Pin 2: Black Line: GND

Notes: If there is labels on sensor for pin definition, please act as the labels.

# 4 Part List



Part	List		
NO.	Item	Quantity	/Remark
1	Controller Box	1	Drive ultrasonic transducer and output signal
2	Ultrasonic Transducer	1	Transducer attached to bottom of container
3	Transducer Extended Wire	1	7 meters
4	Power and Signal Cable	1	Power supply and signal output
5	Transducer Protection	1	Protect transducer, not necessary
6	Double Faced Tape	1	For aluminium alloy , plastic container
7	Tie	1	Fasten transducer and cable
8	Abrasive Paper	1	Clean the coating of installation point
9 *	Couplant (vaseline)	1	Put between the transducer and container While finding the installation point
10 3	*Glue	1	Put between transducer and container for real installation after installation point found. Applicable for alur





\*: The couplant and glue is forbidden to delivery for airplane shipping or express shipping. So we do not offer them in the standard package. Please purchase at local market. The couplant (vaseline) is easy to find at medical store.

It is applicable only if the glue can work for your container and the transducer.



The LED Display tool is helpful to find the good installation point during installation. It is not included in standard package. One led tool is enough for multiple DF550 installation.

# 5 Analog Value Interpretation

For the analog output, it is 0-5V map to 0-100cm linearly. For example, if the output is 2.5V, then the level is 50cm.

Please notified that, there is voltage lost on the cables. So if the controller box output 2.5V, maybe your device can only get 2.4V after the signal cable transmission.

### Deliver by DHL/UPS/FedEx/EMS optional



#### **Our service**

If you have any question about our products, please contace me. I will help you familiar with our products better.

- Support 1 years warranty
- The fastest reply: detailed informations, specific model and price of products will be provided quickly after receiving your inquiry.
- Quality assurance: good quality is assured by advanced manufacturing technology. And all products will be checked by our quality-control manager.
- Excellent package: each unit has individual box and all boxes are packed in standard packages.
- OEM available

### **Company Profile**

Dingtek Technology Group locats in China and has three branches in Beijing, Qingdao, and Hongkong. It has independent R & D center, production center and 24-hour quick response service network.

Since 2006, Dingtek has been focused on embedded systems development, automation research and application. Our main business areas covers sensors design and manufacturing, embedded system design and development, complicated system integration and etc. The application covers automation, automotive, locomotive, new energy.

Besides the standard products, we also offer ODM/OEM for cusotmers special requirement. Not only software design, but also hardware design. We provide not only products, but also satisfactory service!

#### Our factory and team

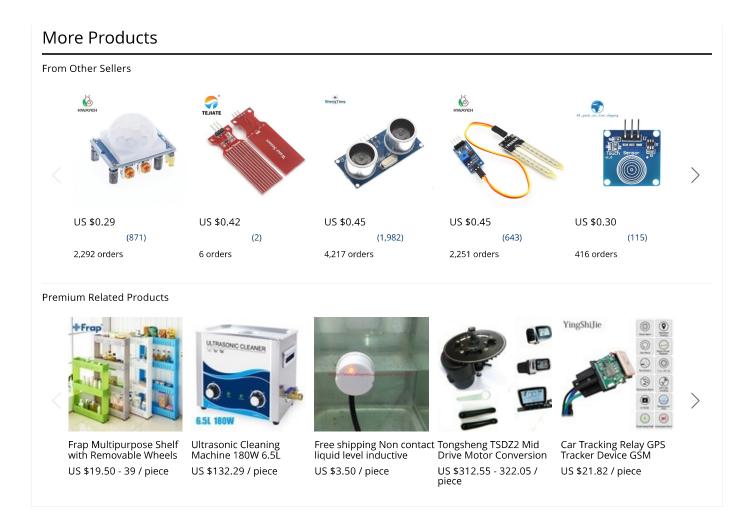


Packaging Details

Unit Type: piece

Package Size: 18cm x 10cm x 12cm (7.09in x 3.94in x 4.72in)

Package Weight: 0.5kg (1.10lb.)



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