

LLS Sensor User Guide



Applicable Model: T622



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2 Product Functions and Specifications

2.1 Product Functions

- Measure fuel tank's fuel consumption.
- Detect an alarm when the fuel level is too high.
- Detect an alarm when the fuel level is too low.

2.2 Specifications

Please refer to the LLS Sensor User Guide provided by the manufacturer.

3 Main Device and Accessories





4 View



5 T622's Dedicated Port

T622's dedicated ports connecting to the liquid level sensor (LLS) are as follows:

				13	T	3
				24		24

Pin Number	Color	Description
1	Reserved	
2	Black	Ground wire
3	Green	RX, T622 receives data from the LLS.
4	White	TX, T622 sends data to the LLS.

Plug the LLS cable (RS232) into T622's dedicated port (RS232 EXT or RS232/485).

6 Using the LLS

Before using the LLS, follow the following instructions.

6.1 Calibrating the Sensor and Setting Value N

Please refer to the LLS Sensor User Guide provided by the manufacturer.

6.2 Configuring the T622

1. Open Meitrack Manager, and choose **Peripheral** tab page to set the serial port and baut rate.

		- □ ※
Device Tracking GeoFence Authorize GPS	Log Peripheral	Reitrack Manager
Roaming Parameter Table	Peripheral	
Enabled Roaming Parameter Table	RS232/485 LLS Oil Mass Sensor V Setting Baud rate V 19200 V	
Select parameter table General Settings Vinte	RS232 EXT CAMERA Garmin navigation Setting Baud rate V 115200 V	Write
-Fuel sensor-	GPS data filterin Reserved	
Fuel sensor type AD fuel sensor	Enable GPS data filtering (If all conditions below are met, GPS data will be updated.)	
LLS fuel sensor full fuel	GPS speed range 10 + To 200 + km/h	
LLS fuel sensor low fuel 0 \$	GPS positioning accuracy < 5.0 \$ *10	
Write	Number of GPS satellites > 3 +	Write
Output port	- Outruit 2	
Trigger time 100 + *10ms Duty cycle 50		
Trigger mode Low level PWM period 5000	the second	
Input Trigger Mode Port2 Positive		Write
0/0	Network Status: Local Current parameter tabl	e: General Settings 4.5.9.22

Please select corresponding port according to the physical port. In this example, use RS232/485.

2. Select a fuel level sensor, and set full fuel value *N* and low fuel value *N*.



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	米ロナ州 VEA 2014/0014 daw (画家始学) - Microsoft Mard	
Image: Constraint of the second sec	Log Peripheral	Reitrack Manager
Roaming Parameter Table	Peripheral	
Enabled Roaming Parameter Table	RS232/485 Garmin navigation 💌 Setting Baud rate 💌 9600 💌	
Select parameter table General Settings 💌	RS232 EXT CAMERA Setting Baud rate 115200	Write
-Fuel sensor-	GPS data filtering	
Fuel sensor type	Enable GPS data filtering (If all conditions below are met, GPS data will be updated.)	
LLS fuel sensor full fuel AD fuel sensor LLS fuel sensor	GPS speed range 10 + To 200 + km/h	
LLS fuel sensor low fuel 0	GPS positioning accuracy < 5.0 ♀ *10	
Write	Number of GPS satellites > 3 🗘	Write
Output port	- Output 2	
Trigger time 100 + *10ms Duty cycle 50	♦ % Trigger time 200	
Trigger mode Low level PWM period 5000	♀ us Trigger mode Low level ♥WM period €000 ♀ us	
Input Trigger Mode Port2 Positive		Write
0/0 Synchronizing parameters completed.	1:1 🗇 C + 🖹 🗶 🖬 🖬 thetwork Status: Local Current parameter tab	le: General Settings 4.5.9.22 ,.:

Note: When the measured fuel value reaches the preset full fuel value *N*, a full fuel alert will be generated; when the measured fuel value is lower than the preset low fuel value *N*, a low fuel alert will be generated.

7 LLS Data

LLS data: LLS number + LLS temperature + LLS value N + LLS frequency

A GPRS data packet with LLS information is as follows:

\$\$C168,866699027509233,AAA,53,22.513608,114.057171,150828023604,A,8,0,0,277,1.2,27,257,55062,0|0|0000|00000000,0 000,0000|0000|019E|05F8,,,3,0000,,15,15,031C07D0082F*65

031C07D0082F is LLS d	lata in hexadecimal format.
-----------------------	-----------------------------

LLS Data	Description	Example
LLS number	LLS data contains 12 hexadecimal characters.	03
	The LLS number indicates the highest two characters.	
LLS temperature	1C (that is, 28°C)	
	eighth and ninth characters (read from right to left).	
LLS value N	Indicates the fourth character to the seventh character.	07D0 (that is, 2000)
	Value range: 0000–FFFF.	
LLS frequency	Indicates the zero character to third character. Value range:	082F (that is, 2095)
	0000–FFFF.	

8 Querying Reports on MS03

8.1 Historical Data Report

1. On the MS03 main interface, choose **Reports**.

- 2. On the **Reports** window that is displayed, select **Historical data** from **Use Normal**. The **Historical data** window is displayed.
- 3. Select a tracker, set the query time, and click is to query LLS value *N*.

Histo	orical da	ita									• 6	3
Fro	m: 2015	5-10-12 🎹 0	0:00 🔻 To:	2015-10-12 📰 23:59 👻 Speed:	>= ~ 0	🗌 Address 🗹 Ig	gnore drift	Q 😢 🛙	🎽 📎			
Ø	Speed	Latitude	Longitude	Location Alarm type	Number of s	at Signal strengtl	Mileage	LLS 3 Temper	LLS 3 N value	LLS 3 Frequer	Running time 🕇	
Plea	0								28.00	3840.00	2Day20:59:17	*
i ost	0										2Day20:59:27	
ic lo	0	22.513350	114.055730	Track By Time Inter	0	31	10.8				2Day20:59:37	
5 1	0										2Day20:59:47	
trac	0	22.513350	114.055730	Track By Time Inter	0	31	10.8	28.00	28.00	3840.00	2Day20:59:58	
ker	0										2Day21:00:08	
l i	0	22.513350	114.055730	Track By Time Inter	0	31	10.8				2Day21:00:18	
	0										2Day21:00:28	
	0	22.513350	114.055730	Track By Time Inter	0	30	10.8				2Day21:00:38	
	0										2Day21:00:48	
	0	22.513350	114.055730	Track By Time Inter	0	30	10.8	28.00	28.00	3840.00	2Day21:00:58	
	0										2Day21:01:08	
	0	22.513350	114.055730	Track By Time Inter	0	31	10.8				2Day21:01:18	
	0										2Day21:01:28	
	0	22.513350	114.055730	Track By Time Inter	0	31	10.8	28.00	28.00	3840.00	2Day21:01:39	
	4											
	«	V Page 2	6 Total2	27 > > C Display1251 -	1300Total132	2				Show drive	r and license-plate	

8.2 Event Report

You can read full fuel or low fuel alarm events from an event report.

Event r	eport									⊜⊗
Event:	Select events	✓ Quick time	From: 2015-10-12	00:00 × To: 2015	-10-12 📖	23:59 👻	Address	Q 🚺 🎽 🤇	9	
Θ	Tracker name	Alarm type	GPS time	Receiving time	GPS valid	Speed	Latitude	Longitude	Location	
Pla	T622	External Battery Cut	2015-10-12 10:12:08	2015-10-12 10:12:19	Invalid	0.00	22.513608	114.057166		
se										
sele										
t a		External Battery On								
trac	T622	Fuel Empty	2015-10-12 10:40:33	2015-10-12 10:40:25	Invalid	0.00	22.513608	114.057166		
ker		External Battery On	2015-10-12 10:41:43	2015-10-12 10:41:55	Invalid	0.00				
	T622	Fuel Empty	2015-10-12 10:41:58	2015-10-12 10:41:58	Invalid	0.00	22.513608	114.057166		
	T622	Start to Halt	2015-10-12 11:46:58	2015-10-12 11:46:51	Invalid	0.00	22.513608	114.057166		
		Start Moving	2015-10-12 12:24:44							
	T622	Start to Halt	2015-10-12 12:39:48	2015-10-12 12:39:50	Invalid	0.00	22.513350	114.055730		
	T622	Start Moving	2015-10-12 12:43:58	2015-10-12 12:43:59	Invalid	0.00	22.513350	114.055730		
	T622	Start to Halt	2015-10-12 12:54:06	2015-10-12 12:54:07	Invalid	0.00	22.513350	114.055730		
	T622	Start Moving	2015-10-12 13:33:55	2015-10-12 13:33:57	Invalid	0.00	22.513350	114.055730		
	T622	Start to Halt	2015-10-12 13:59:35	2015-10-12 13:59:36	Invalid	0.00	22.513350	114.055730		
	🔣 🎸 Page 1	Total1 >>	Display	1 - 15Total15				Show dr	iver and license-p	late

If you have any questions, do not hesitate to email us at info@meitrack.com.