APPLICATION NOTE

GPS sensor

AN-09 for TL-6624, TL-6524, TL-6724, TL-2524

General Information

The GPS sensor with embedded antenna is waterproof according to IEC60529 IPX7-immersion in 1 meter of water for 30 minutes and therefore the device is also capable of outdoor installation.

The device should be installed in placement providing a clear view of GPS satellites for the best performance. The best practice is to test the device performance in considered placement if there are doubts about suitability of location.

 \triangle NOTE:

Installation

Do not use a sharp object to remove user-replaceable batteries. Contact your local waste disposal department to properly recycle the batteries.

> Do not remove or attempt to remove non-replaceable batteries. When disposing of the unit, take it to a professional service, such as a waste electronics treatment facility, to have the battery removed and recycled.

A NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and may cause harmful interference to radio communications if not installed and used in accordance with the instructions. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio reception, which can be determined by tuning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the • receiver
- Connect the equipment into an outlet that is on a different circuit from the GPS unit
- Consult the dealer or an experienced radio technician for help

1.65 inches [42 mm] M4 Thread 120 Degree 3.58 inches [91 mm] 2.44 inches [62 mm]

Fig.1: Flush Mount Dimensions



Fig.2: Optional Magnetic Mount

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Fig.3:Serial Port connection of GPS sensor

Note1 for Fig.3: *Labels are according to GPS sensor Technical Specification by Garmin Note2 for Fig.3: **It means TL-6624, TL-6524 or TL-6724.

TL-2524 FUEL COMPUTER						
Pin	Input name	Sensor w/colour	I/O			
3	RXD from GPS (RS-232)	White	In			
4	TXD to GPS (RS-232)	Blue	Out			
2	Ground for GPS communication (RS-232)	Black				

TL-6624, TL-6524 or TL-6724 port COM1 (P02)					
Pin	Input name	Sensor w/colour	I/O		
3	COM1 RS-232 (RX)	White	In		
4	COM1 RS-232 (TX)	Blue	Out		
16	COM1 RS-232 (GND)	Black			

TL-6624, TL-6524 or TL-6724 port COM2 (P02)						
Pin	Input name	Sensor w/colour	I/O			
17	COM2 RS-232 (RX)	White	In			
18	COM2 RS-232 (TX)	Blue	Out			
5	COM2 RS-232 (GND)	Black				

GPS sensor could be connected to COM1 or COM2 of TL-6x24; however it is necessary to set appropriate COM port in Setup menu (Menu External Devices->GPS).

Technical information:

Type of Sensor: GPS 16xHVS (Garmin) Input Voltage: 8 to 40VDC unregulated Input Current: 100mA@8VDC 65mA@12VDC 28mA@40VDC Operation Temperature: -30°C to +80°C (-22°F to +176°F) Waterproof according to IEC60529 IPX7-immersion in 1 meter of water for 30 minutes

Rev. A

Information furnished by TL elektronic is believed to be accurate and reliable.

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