T8 Mini

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Rugged Outdoor Telematics Platform

The T8Mini family of telematics products combines fastest time-to-market with an excellent price-performance ratio. It addresses all mobile applications that require accurate positioning and communication based on cost-effective, convenient and secure standard internet protocols. By integrating the antennae as well as the backup battery into a waterproof enclosure, the T8Mini provides easy installation and use in outdoor environments. The T8Mini is the first telematics platform integrating the SiRFstarIV GPS technology providing an unprecedented level of performance in asset tracking.

Features		Benefits
Integrated antennas and battery	•	Complete
Application implementation support	•	Short tim -to-market
SiRFstarIV technology	•	Industry leading GPS performance
Industrial M12 connector	•	Standard interfaces
CE, FCC, PTCRB	•	Compliant to worldwide legislation
E-Marking	•	Approved for vehicles

SiRF A CSR plc Company Powered SiRFstarIV

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Application Are

- *Transport & Logistic*
- *Security & Surveillance*
- *Insurance Rental*
- *Cars*
- *Vans*
- *Trucks*
- *Trailer Tracking*
- *Company Car Management*
- *Private/business Miles*
- *Taxi*
- *Bus Fleets*
- *Motor Homes*
- *Caravans*
- *Boats*
- *Plant Machinery*
- *Farm Machinery*

Application areas

Further features include flexible I/0, a wide power supply range with a backup battery, making the T8Mini ideal for basic and advanced tracking applications. As qualified and certified product with a single standard interface connector, the T8Mini provides advantages in terms of low system, installation and market entrance cost. With excellent tools and professional support for application implementation to save our customers' investment and know-how, this product is ideally suited for easy integration into existing client and server based back office solutions.

Major components

GPS receiver	SiRFstarIV
Channels	48
Position accuracy (horizontal)	< 2,5m CEP autonomous
sensitivity	-163dbm (tracking) -148dbm (acquisition · cold)
GSM/GPRS modem	Sagem HiLo NC
Quad-band	850/900/1,800/1,900 MHZ
GPRS	Mul -slot Class 10 (4Rx/2Tx) up to 85.6kbps
µ– Controller	STM32 CortexM3 32-bit RISC
SRAM	2MB
Flash	4.5MB

Power

Input voltage	8 to 30 VDC
Current draw	
Operational	45 mA (typ live tracking) @12V
Sleep mode	3.0 mA (max) @12V
Standby	100 uA (max) from Battery
Power Alarm	External power fail
Battery	Li-ion or Li-Polymer
Capacity	1,700 mAh
Charging	Integrated, SW controlled
Battery Alarm	Low battery voltage
Protection	Reverse polarity protectic Overvoltage protection Internal self resetting fus

Communications

Protocol	
UDP/IP	User datagram protocol
TCP/IP	Transmission control protocol
SMS	Short message service

Mechanical (with mounting flanges)

Dimensions	95.0 X 65.0 X 30.0 mm 3.7" X 2.6" X 1.2"
Weight	102g / 3.6 oz (no battery) 142g / 5.0 oz (with battery)

Environment

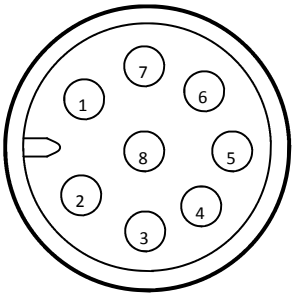
Operational temperature	-40°C to +60°C (no battery) -20°C to +40°C (with battery)
Protection	IP67

Sensors

Tremble detector	Mechanical
MEMS Accelerometer (±2/8g)	Tri-axis

Input/Output

Digital inputs (0-30v)	3 (multiplexed
Digital outputs (500 mA)	2 (multiplexed
Analog inputs (0-30v 12 bit)	2 (multiplexed
Serial data (RS232)	1
Dallas / Button interface	1
Connectors	M12, 8 pin, male



View on unit

Pin	Colour	Pin assignment / function
1	Blue	Digital input 2 (ignition)
2	White	RS232-Rx (serial in)
3	Pink	Digital Input, output or analog input 0
4	Yellow	RS232-Tx (serial out)
5	Grey	Button and Dallas input
6	Red	Vin (12/24V Supply)
7	Green	Digital Input, output or analog input 1
8	Brown	GND