



## TETRA Remote Telemetry Unit

Part no.: TRTU-02

TETRA Remote Telemetry Unit specially designed to operate in TETRA (ETSI) networks either TMO or DMO.

TRTU is built to be installed on standard DIN rail.

Smaller data - bigger potential. Only 10 bytes per sensor in hex SDS gives an advantage to use a single TETRA base station to control hundreds of Remote Telemetry Units without keeping voice channels busy.

Remote installations that used to be checked manually can be monitored automatically through the TETRA Network. All data needed from mobile and fixed installations now collected in a small hex SDS and sent to the database to be reported further.

TRTU with built-in TETRA modem connects by I/O to external sensors (CURRENT LOOP), execution units (OUTPUTS) and dry contacts (INPUTS), audio notification system (A-OUT). It is configured to send TETRA SDS in hex format to Data Base Applications and can be remote manageable. Inputs run high or low.

Power from the vehicle has a double transformation to secure either unintentional or intentional damage.

When a connection to a TETRA base station is not available or unit is out of coverage TRTU collects and stores up to 8000 reports in power-independent memory with LED signaling. When connection is recovered TRTU sends stored SDS to a remote database with delivery control.

### Inputs / Outputs secured

All inputs / outputs are secured by optocouplers / optorelay.

Power may varies from 13 to 30 VDC, with a security of unintentional signal crossing. Unit is able to provide stable power of 12 VDC (300 mA) to external devices.

When a connection to a TETRA base station is strong TRTU can be connected to a small portable antenna with SMA connector to reduce installation and maintenance cost.

### Optional interfaces and services:

- More then 8 INPUTS;
- More then 8 OUTPUTS;
- Pulse input;
- Built-in Speaker;
- LED panel for response and reply to Dispatcher or Application;
- RS485;

**Specification:**

<b>Physical data</b>	
Dimensions, mm	W160 x H90 x D57
Weight, kg	0,4
Ingress Protection	IP20 (IEC 529)
Mounting	DIN rail
Operational temperature	-20 ... +60 Degrees Celsius
Storage temperature	-40 ... +85 Degrees Celsius
<b>Inputs/Outputs</b>	
Inputs signals (Low=0V, High=9-16 VDC)	8
Digital Outputs	8
Current Loop	4 (from 1.1 to 9.4 kOhm)
Audio output	1 (120 Ohm, 1V)
Digital input RS485	option
Fuel flow control by Pulse input	option
<b>Configuration</b>	
Standard interface	RS232
<b>Radio details</b>	
Standard	TETRA TMO / DMO (Voice & Data)
Frequency band	380 – 430 MHz (option: 407-470 MHz)
Emission	18K0G7W
Power	Up to 1.8W (class 3L) with steps of 5db
RX sensitivity	-112 dbm
RX class	A & B
Antenna connector	SMA female (50 Ohm)
<b>Power source</b>	
Vdd	13 ... 30 VDC (up to 2A)
Vo	12 VDC (up to 300 mA)
<b>SDS transport</b>	
SDS TL	Yes

**Applications:**

- Vehicle and Fixed installation control
- Remote Alarm control
- Security and Surveillance
- SCADA applications
- Audio notifications

**Why TETRA?**

That's easy. Only TETRA (ETSI) as a standard provides secured Voice and Data for professional needs. TETRA is the best solution for the telemetry applications with voice supported.