



## TUBE-300S

### Fully Integrated Telemetry device GSM/GPRS with solar panel

Tube 300S has been designed for unmanned, stand-alone, long-life, and self-powering remote monitoring and control. It can independently acquire data from the field and send command to external devices or it can be remote controlled. Communication and remote control are via GSM/GPRS network: this allows communication even in remote and inaccessible areas. Tube 300S great interconnection flexibility allows connecting it with a number of types of sensors, transducers and other devices. An optimum management of power supply consumption ensures long-lasting autonomous operation. The power is provided by the solar panel embedded in the unit. It is also possible to power the device from an external source of energy. Tube 300S very compact size makes it extremely pleasant and easy to use in any situation and it minimizes its visual impact. The device has been designed to be rugged proof and theft protected. GSM, modem and direct connection to a PC programming offer considerable opportunities to customization. For special requirements, we can develop custom versions. Tube 300S is the only solution to keep in touch with a device or a probe in a remote rural area where you don't have any power supply available.

#### APPLICATIONS

Typical applications of Tube 300S:

- Unattended acquisition and storage of data on the field
- Remote real time telemetry
- Automatic alarming
- Stand-alone automations
- Remote controlled automations

#### Available Interfaces

The Tube 300S has:

- Nr. 1 Software selectable RS485/RS232 Serial port
- Nr. 2 ON/OFF outputs for activation of external devices
- Nr. 2 configurable inputs (ON/OFF, analog 0-10V, analog 4-20mA)

The RS485 and RS232 serial connection allow to connect almost any "intelligent" device.

The two configurable inputs enable a link with simple equipment or devices (for example, a motion sensor, a level sensor, etc.).

The device has an embedded Tamper input, for detection of tampering, and a motion sensor to generate an alarm when the unit is moving.

#### FEATURES

- Unattended data acquisition and storage without external power supply
- Automatic alarm messages triggered by field events
- On SMS
- Via email
- Via FTP
- Data log download
- Via FTP
- Via email

### SPECIFICATIONS

#### Housing

Dimensions Diameter	70mm (tube) 75mm (top head)
Length	465mm.
Material	Methacrylate 5mm thick
Weight with Battery	1300gr
IP Class.	IP65

#### Power

Battery	NiCd 7,2V / 1400mAh
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#### Operation Time

Solar Panel powered	Unlimited, depending on sunlight exposition and programmed activities
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#### Communication

Communication	GSM four band, GPRS, SMS, Email, FTP Option: CDMA
Antenna	Built in Stud Antenna with SMA connector

#### Data Access / Storage

Mode	Data Access via Email, or FTP Data Storage: Standard Mini-SD Data logger of up to 144 Million readings Real Time Reading
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Alarm Capability	Via SMS, Email, FTP or to a dedicated software suite.
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#### Programming

Programming Mode	Through ANT TUBE TOOL communication software
Operation Mode	1) Programmable Events (Up to 8 events) 2) Automatic Data Logging (Reading interval: 1 min to 24 hours) 3) Alarm Transmission Data logging and Batch transmission of stored data

#### Interfaces

Serial Interfaces	RS232 or RS485 software selectable (with automatic RS232 switching when a PC connection is detected)
Input / Outputs	2 Outputs Open Drain (1A@24V max). 2 Inputs User Configurable (Digital Hi Speed Input, 0-5V Analog Input, 4-20 mA Analog Input) Support MODBUS (other protocols available upon request).

#### Operating Limits

Temperature Range	-20 to +70 °C
Humidity	95% max n.c.

#### Other Features

Alarm	The unit can generate an alarm if tilted or disconnected, if exceeds critical temperature values, parameters threshold values, or critical battery levels.
Real Time Clock /Calendar	High precision Built-In Real Time Clock and Calendar with Leap Year

#### ORDERING CODES

<b>TUBE-300</b>	Fully Integrated Telemetry device GSM/GPRS
<b>TUBE-300S</b>	Fully Integrated Telemetry device GSM/GPRS w/solar panel

Set-up software (All versions of windows NT®, 2000®, XP®, 2003®, Vista®, 2008®) included