TBox Nano specifications

INPUTS & OUTPUTS

Removable I/O connectors	Yes
Maximum I/O points	1 x Digital Output 4 x Digital Input 3 x Analogue Input 1 x RS485 serial port
Digital modules	Built in
Analog modules	Built in

ANALOGUE INPUTS

Type of input (not independent)	2 x 4 - 20mA 1 x 0 - 5V
Resolution	20 bits
Accuracy	0.1% (voltage) 0.15% (current)
Sensor supply output	24V DC

DIGITAL INPUTS

Type of input	Volt free contacts
Contact wetting voltage	5V DC nominal
Input pulse frequency	0 - 5Hz

PROCESSOR UNIT

Type	Kinetis K66 (ARM Cortex M4) 96Mhz
Flash	8MB Flash + 2 x 1MB CPU Flash
RAM	4MB SRAM + 256KB CPU SRAM
Memory (SD card)	Up to 32GB
Real-time clock	Yes
Event logging	Expansive historical data storage capability

COMMUNICATIONS

Wireless	3G
Local	USB RS485
Protocols	Modbus (RTU/TCP, Master/Slave), DNP3 IEC 60870-5-104 Others available on request

CONFIGURATION

Local (PC/Laptop)	Yes
Remote via network	Yes
Programmable Logic	Yes

POWER

Battery (default)	19.2V DC lithium battery 12.4Ah
Power down modes	Yes

ENVIRONMENTAL

Working temperature	-40°C to +70°C
Storage temperature	-40°C to +85°C
Submersion	IP68 4 metres for 4 days

DIMENSIONS

Width	142mm (5.59”)
Height	197mm (7.75”)
Depth	115mm (4.52”)
Weight	1.5kg

APPROVALS

CE, UL/CSA, FCC, RCM, RED

For pricing or any further information, please contact Omni Instruments Ltd.

omni INSTRUMENTS
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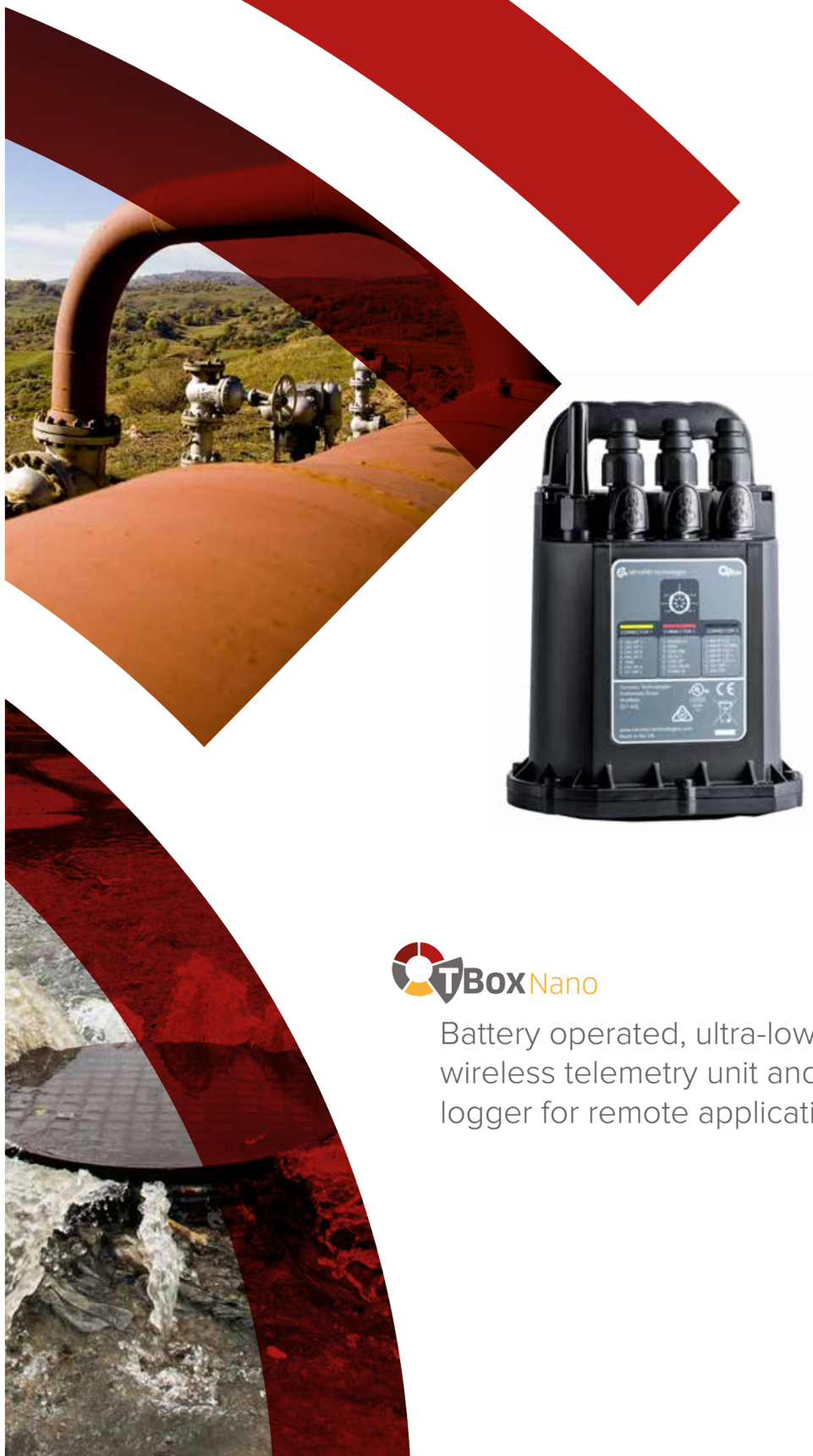


TBox Nano

Battery operated, ultra-low power wireless telemetry unit and data logger for remote applications

Introducing the TBox Nano, a battery-powered telemetry unit and data logger which combines advanced logic processing for control applications with ultra-low power monitoring and exceptional battery life for wireless monitoring. With the TBox Nano, you will never be in the dark about the operation of your remote assets.

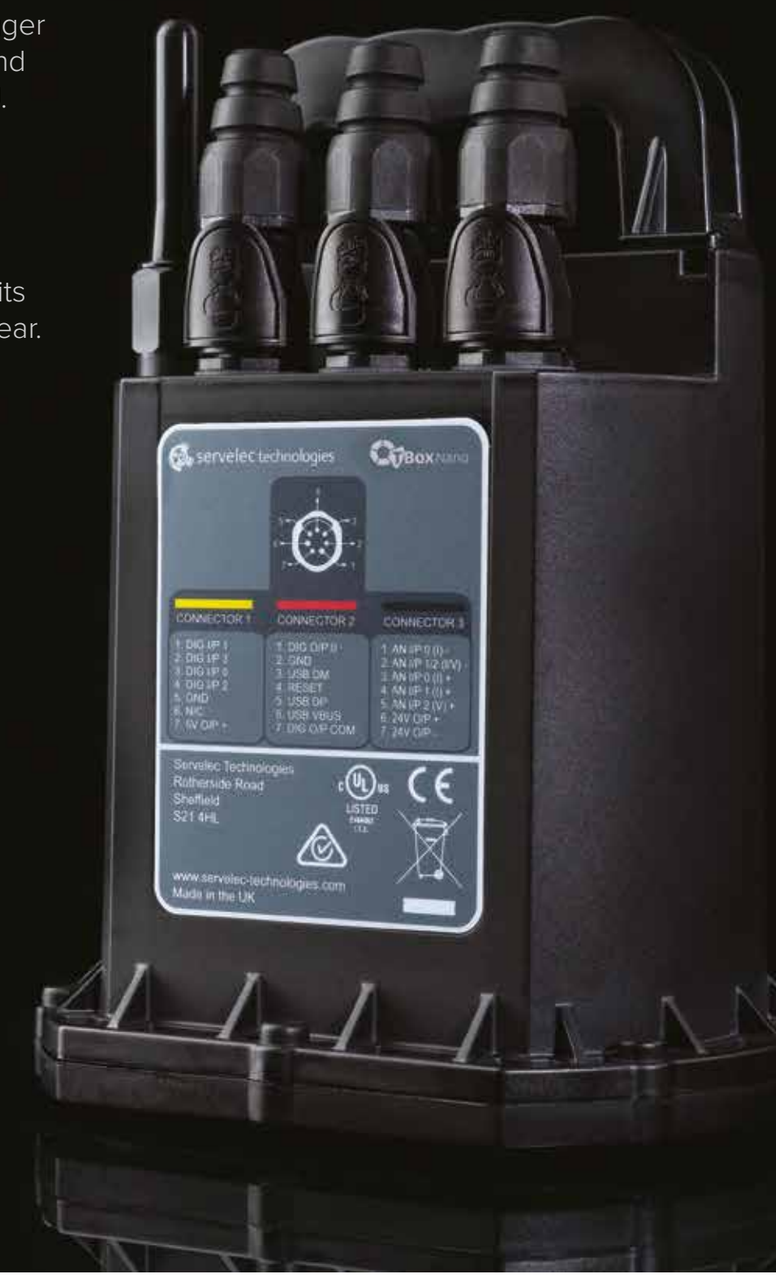
The TBox Nano:

Is a state-of-the-art data logger with the logic processing and control capability of an RTU.

Provides innovative push technology for instant notifications.

Accurately logs and transmits data wirelessly, year after year.

Has a robust, IP68-rated rugged construction.



Servelec Technologies' TBox Nano is a powerful self-contained data logger, RTU and machine to machine (M2M) transmitter.

Included in the TBox Nano are many of the RTU features already available in TBox application software including logic processing and push technology.

- Up to ten years' battery life (depending on usage)
- Submersible casing (IP68, 4 metres at 4 days)
- Wide operating temperature range (-40°C – +70°C)
- Remove the need for multiple devices
- Chamber, pole and wall mounting options
- 30 years telemetry industry experience inside every unit

Typical applications

The TBox Nano saves you money. With the logic and control capability of an RTU and the ultra-low power operation of a wireless logger the TBox Nano removes the necessity for multiple devices for one application. Its digital output and logic processing capability means it operates like an RTU, enabling you to control your remote dispersed assets wirelessly.

The TBox Nano's exceptional battery life and expansive historical data storage capability means it can collect, log and transmit data year-after-year. The TBox Nano is ideal for control and monitoring applications such as:

- Sewer monitoring and pump control
- River level monitoring and sluice gate control
- Temperature monitoring
- Water level monitoring
- Flow monitoring
- Pressure monitoring

Features

The wide range of TBox Nano features include:

- 1 DO, 4 DI, 3 AI and 1 RS485 serial port
- Built in 3G modem
- Lithium battery with up to ten years' battery life
- IP68 enclosure, submersible 4 metres for 4 days
- Modbus, DNP3 and IEC 60870-5-104 protocols supported
- Advanced logic processing
- Highly configurable alarms
- User friendly configuration
- Expansive historical data storage capacity

Intuitive configuration

TBox TWinSoft

TWinSoft is an easy-to-use and intuitive Windows application which is used to configure TBox hardware. The wizard, simple dialogue boxes and predefined variables allow users to rapidly create their applications and dynamically control communication, alarms, data logging and logic, locally or remotely, in complete security.