

## OBSERVANT C3

A flexible monitoring platform for remote infrastructure management incorporating many innovative features, the Observant C3 is the cornerstone of the Observant system. The Observant C3 can be configured for modular operations or complete stand-alone operations via integration into Observant's robust, tamper and vandal proof solar enclosure.

### C3 Stand-Alone

Integrated with specifically designed add-ons, the Observant C3 delivers unparalleled functionality tailored to meet the requirements of any monitoring scenario. The compact design and flexible connectivity make it ideal for integration into existing infrastructure.

### Electronics Module

The Observant C3 electronics module is encased in a rugged ABS enclosure. An integrated 32mm DIN rail mount makes it compact and convenient for wall, cabinet or outdoor enclosure mounting.

### Integrated Solar Enclosure

Designed with environmental protections, incorporating UV stable, watertight and debris shedding fittings, the integrated C3 solar enclosure reduces the risk of vandalism and exposure to tampering.



The Observant C3 allows for a large range of equipment to be remotely managed by the Observant system and offers a wide array of wireless communications options to provide cost effective coverage and reliability for comprehensive remote management.

The Observant C3 is covered by a three year warranty and backed with unparalleled after-sales service. Please refer to the Observant Equipment Warranty and the Observant Support Service Level Description for full details.

## PRODUCT SPECIFICATIONS

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### ELECTRONICS MODULE

#### Mechanicals

- Integrated computer, radio, charger and battery
- Rugged ABS enclosure
- Dimensions: 215mm (h) x 160mm (w) x 75mm (d)
- Integrated 35mm DIN rail mount for wall, cabinet or outdoor enclosure mounting
- Compact and convenient cable connections via plug-gable terminal blocks
- Cable stress relief mounts

#### User Interface

- Bicolour LEDs indicating IO, comms and power status
- Piezo sounder for audible alerts and user feedback
- Touch button for power control and user programmed gestures
- Pinhole reset button for in-field diagnostics

#### Power

- 1 x High efficiency solar power input
- 1 x Secondary power input
- 1 x 2.5mm DC plugpack input
- Inputs tolerant of up to 60V
- 3.8A peak current draw
- Typically less than 500 mW average input power consumption (depends upon wireless and sensor configuration)
- Integrated lifetime lithium technology rechargeable battery
- Highly efficient battery charger with maximum power point tracking, remaining power indication and other diagnostics

#### Sensor Connectivity

- All pins are protected against short circuit, reverse polarity and voltage transients
- 4 x Dual purpose switched power outputs
  - Nominal 12V power source
  - Auto resetting 600mA current limit
  - 20V, 4-20mA loop powered sensor interface mode
- 4 x Dual purpose inputs
  - Configurable digital type (sink or source)
  - Frequency measurement and pulse counting up to 1kHz (50% DC)
  - 0-10V analog input mode
- 2 x RS485 sensor ports
  - Fault tolerant to 60V
  - Switched 12V, 600mA sensor power supply
- 1 x Dual purpose serial sensor port
  - Configurable SDI12 or RS232 line levels
  - Switched 12V, 600mA sensor power supply

#### Wireless Communications Options

- 5W UHF via BNC connector
- 1W spread spectrum 900MHz via SMA connector
- 3G/GSM cell radio via SMA connector and SIM card slot
- Combinations of technologies can be factory configured

#### Other Standard Features

- USB port (Type B connector) for configuration and monitoring
- Data logging and remote synchronisation of internal and sensor parameters
- In-built GPS via SMA antenna connection (for geo-coding of logged data)
- Internal real-time clock (for time-stamping of logged data)
- Remotely upgradable software
- Extensive internal diagnostics and reporting
- Device driver software architecture for expansion of sensor support

### INTEGRATED SOLAR ENCLOSURE

#### Mechanicals

- Robust and vandal proof solar power supply and environmental protection for the C3 electronics module
- Internal DIN rail for C3 module mounting
- Integrated 14 watt solar power supply
- Adjustable solar panel angle to maximise solar efficiency

#### Environmental Protection

- All fastenings internal to the enclosure to reduce exposure to tampering
- Pad-lockable door latch to limit opportunities for vandalism
- Watertight, UV stable and debris shedding design
- Detachable bird deterrent

#### Mounting and cabling options

- Clamp mount suitable for pole diameters up to 90mm
- Enclosure can be mounted at any point on the pole
- Direct wall mounting option
- Single bottom cable entry gland suitable for conduits up to 25mm
- Cable routing internal to pole via optional rear entry cable glands
- Internal space for excess cable or in-line connectors
- Multiple antenna mountings to suit various wireless configurations