

CR3 base station

Pro Signal Receiver & Processor



The CR3 base station with receiver, retrieves and processes signals from *Hanwell Pro radio sensors. These sensors communicate at regular short intervals with the CR3, which logs and stores the data pending transfer to a PC for analysis and archival storage.

* CR3 only works with Hanwell Pro

Standard Features

- ✓ *RS485 output to drive Hanwell MS1000 control cards for building control or data replication
- ✓ Complies with RoHS, EU & WEEE directives
- ✓ Carries CE Marking

* CR3 Standard Ethernet version only

Optional Features

- ✓ Built in GSM module for remote communications via the mobile phone network or ethernet connection
- ✓ Modbus RTU Expansion unit for interfacing to third party systems and BMS systems

Typical Applications

- Warehouse/storage monitoring
- Interface to BMS systems
- Conservation heating control
- Monitoring in buildings/galleries/show cases
- Remote monitoring where there are no computers or networks



Product code: CR3

CR3 Instrumentation specification

Dimension (Excl. ancillaries)	204 x 156 x 68mm
Weight	1 kg
Power supply	12v universal power supply
Case material	Powder coated extruded aluminium
Instrument operating range	5°C to +40°C (non-condensing RH environment)
Storage temperature	-20°C to +35°C
Clock accuracy (logging)	40ppm @ 25°C

Controller inputs

Radio sensors	Narrow band FM radio
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Controller outputs (CR3 Standard only)

MS1000 control RS485
Alarm relay via jack socket

Receiver instrument specifications

Frequency options	A range of frequencies are available between 433-458 MHz. Country specific regulations apply.
Dimensions	100 x 100 x 50mm
Weight	250 grams
Case material	ABS
Instrument operating range	5°C to +40°C (non-condensing RH environment)
Storage temperature	-40°C to +60°C
Clock accuracy (logging)	40ppm @ 25°C

CR3 functions

Display	2x16 line alpha-numeric
Environmental rating	IP54 for internal use only
Alarm indication	Red LED (CR3 Standard only)
Comms indication	Yellow LED
Status indication	Green LED
Backup supply	7.2v rechargeable NiMH pack
Memory capacity	49152 standard records

Note: Not applicable to CR3 Modbus

Manufactured by Hanwell | Ellab RoHS

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Technical Information: CR3 standard: Ethernet connection

- The standard CR3 is a wireless data collection device that is used to collect wireless data from the entire range of Hanwell Pro wireless transmitters and using TCP/IP communications passes that data through the network to a central server running Hanwell EMS software.
- The CR3 standard is primarily used as a data collection device if control is required either at the time of installation or at some point in the future. The CR3 standard has an RS485 output designed to drive Hanwell MS1000 control cards.
- The CR3 standard has the option of having a wireless transmitter output to drive MS1003 wireless control cards, or CH3 Radio Humidistats.

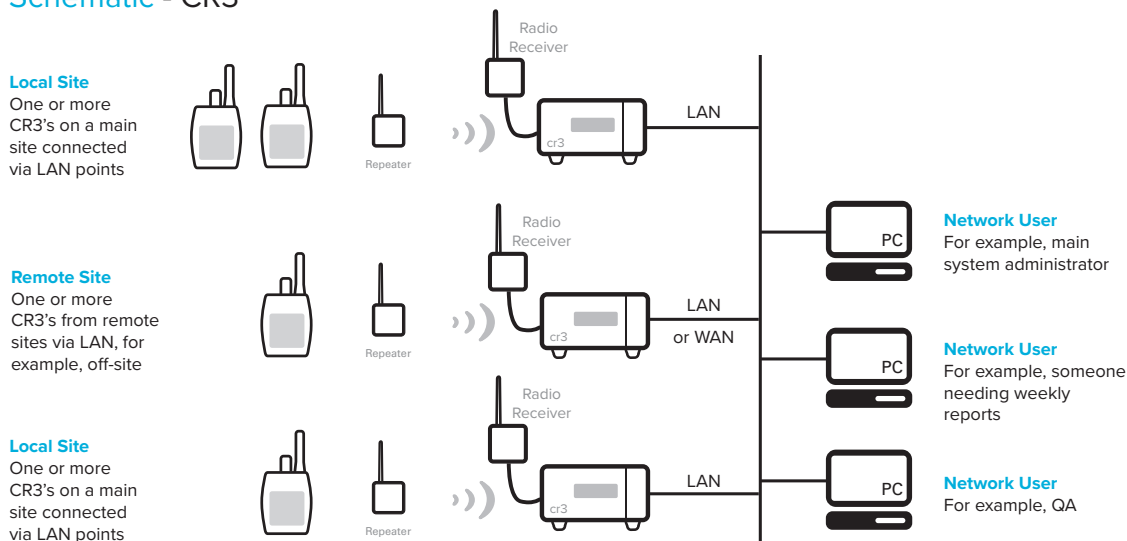
Technical Information: GSM: USB connection for factory configuration

- The CR3 with GSM communications is a wireless data collection device that is used to collect wireless data from the entire range of Hanwell Pro wireless transmitters and using GSM mobile communications passes that data through the cellular network to a central server or a cloud hosted server running Hanwell EMS software.
- The CR3 with GSM communications is often used where there is no network connection, or it is desirable to collect and transfer data independently from the client's IT infrastructure.
- The CR3 GSM service requires a M2M GSM SIM card. (Please note this device will not work with a CDMA SIM card). The data is routed through our cloud-based data routing service. This provides safe access to the CR3 data, using an outgoing connection from the EMS software to a standard HTML port on the Data Routing Service, so in most cases there is no need to modify Firewall settings.

Technical Information: Modbus: USB connection for configuration

- The Modbus CR2 is a wireless data collection device that is used to collect wireless data from Hanwell Pro temperature, RH/T, Lux and UV sensors wireless transmitters and produce a Modbus RTU Expansion unit data stream for integration into third party systems. The Modbus data stream sits on a two wire RS485 signal. Current sensors available are, temperature single and dual channel and temperature and humidity. Custom versions may be possible please check with us.

Schematic - CR3



One system can comprise an unlimited number of sites.