GENII RC250 TELEMETRY RECEIVER SYSTEM

Eltek

SPECIALIST
DATA LOGGERS

Easy to use customised data loggers
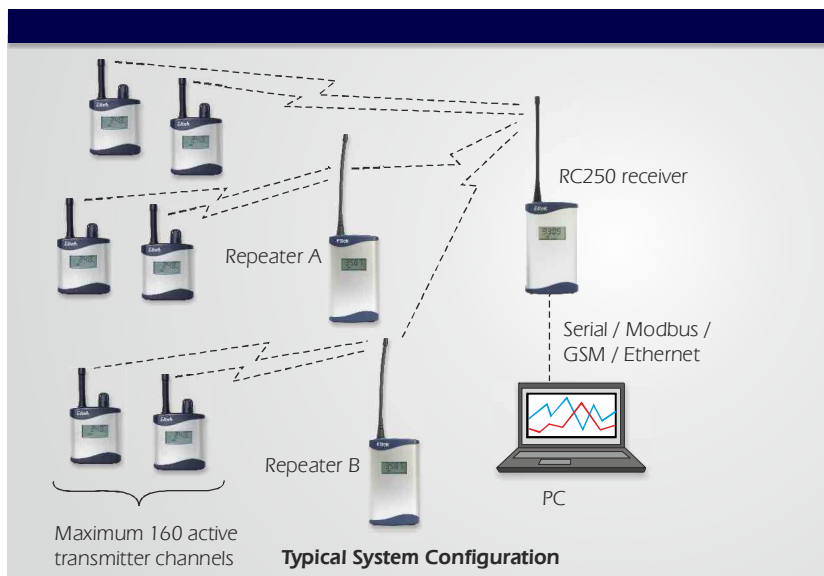
The RC250 is a high performance telemetry receiver designed for use with the standard GENII range of telemetry transmitters, repeaters and accessories. ModBus or Serial data from the RC250 is processed by the connected PC for integration into industry standard PC Software. Such software could include LabVIEW, DASYlab, Wonderware or proprietary software, that can include compliance to CFR21 Part 11.

Radio Telemetry offers a cost effective and practical alternative to hardwired monitoring and alarm systems without forfeiting reliability, accuracy or security. The use of telemetry does not restrict the sensor type that can be used. License exempt UHF radio means low cost of ownership and long range. Unlike mesh radio Eltek telemetry radio range can be hundreds of meters without the use of nodes requiring power. Furthermore, the range can be extended to cover large areas by strategic placement of repeaters.

RC250 receiver

Repeater A

Serial / Modbus / GSM / Ethernet

Repeater B

PC

Maximum 160 active transmitter channels

Typical System Configuration

Gen II RC250 telemetry system

The RC250 is intended for use as an interface to Generic software such as DASYview, LabVIEW, Wonderware's InTouch and OEM software.

This feature rapidly realises a broad spectrum of applications including:-

· Monitoring and analysis

· Alarm and control

· Real time data

· Profile mapping

For customers in the pharmaceutical sector (e.g. where CFR21 Part11 compliance is required) and in the industrial, construction, storage, research and conservation sectors.

RC250 features

· Built in rechargeable battery pack for more than 24 hour operation should AC supply fail

· Power supply for 110 to 250VAC included

· Built in display for indicating which TX is active and its received signal strength

· Supplied with configuration software which includes set-up for authorised transmitters

· Maximum 160 channels

· Can be used with multiple repeaters (type RP250GD)

· SMA antenna socket for attached antenna or external antenna options

· Rugged aluminium case for free standing or wall mounting

· Polled data output on 6 pin Mini DIN socket

· For direct connection to PC or via Intranet or Ethernet using

· Moxa D311 adaptor option or via GSM using Eltek GSM modem kit

Typical transmitters

RC250

Transmitter features

· Sensors can be integral, external or both

· Inputs for voltage, current, light, pressure differential and weather monitoring

· Programmed from the PC

· Battery powered using standard alkaline batteries

· 5 year battery endurance (transmitter interval set to 5 minutes)

· Transmitter interval can be set from 1 sec. to 4 hours

· For full transmitter list see brochure TD1079

Repeater features

· Programmable

· Built-in rechargeable pack for more than 24 hour operation should AC fail

· Authorised transmitter list

Transmitter with display

GENII RC250 RECEIVER

Specification

Receiver frequency:	434.225Mhz , 914.5Mhz or other (contact Eltek)
Sensitivity:	-110dbm
Useable sensitivity:	-117dbm
Compliant to:	EN300 220-1
Ambient temperature:	-10 to +55°C
Humidity:	Up to 95% (non condensing)
Power supply requirements:	12V DC at 500mA
AC power supply provided:	100/250AC to 12VDC type MP12U
Built in rechargeable batteries:	7.2V (6 x NiMh 1.8Ah pack)
Battery reserve:	>24 hours
Dimensions (ex. Antenna):	D 41mm x W 80mm x H125mm
Weight:	500g inc. batteries
Antenna connector:	SMA (socket)
Data out & programming connector:	6 pin Mini Din (socket)
Data protocol:	ModBus or to Eltek specification TN102 Ver1.0
Serial comms:	RS232

Antenna options

UHFflexi/SMA standard quarter wave whip

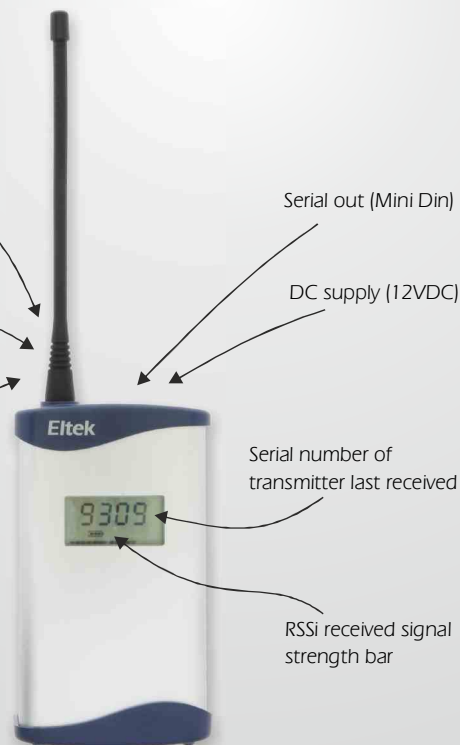LW-ANT/SMA – lightweight indoor or external dipole antenna

Eltek supplied Yagi directional antenna– specified as required.

Ifor increased receiver sensitivity from a specific transmitter location a Yagi antenna can be used.

Receiver connections and display

Serial out (Mini Din)

DC supply (12VDC)

Serial number of transmitter last received

9309

RSSi received signal strength bar

Accessories

MOXA Nport 5110: Ethernet / internet adapter. Includes AC power supply and lead to connect to RC250.
GSMSQ: GSM modem with antenna and lead to connect to RC250.

Distributor:

ISO 9001
REGISTERED FIRM