SRV250 is a new receiver logger from Eltek designed for use with the extensive range of GenII transmitters. It is intended for users who require realtime data, multiple site access and advanced analytical software. Communications from the SRV250 to the remote server is via mobile data providing a truly single box solution.

GenII SRV250 telemetry system

The SRV250 is the hub of the system. Sensor values from transmitters are held in a register that is continuously uploaded to the server, which can be located worldwide. System resilience is introduced by logging measured data in the SRV250 should mobile data connection or remote site IT fail.

Used together with Eltek's Darca Heritage software it provides a cost effective, easy to manage and maintain monitoring system, with no annual software maintenance or service charge.

SRV250 data can also be viewed over the internet in a web browser using the Eltek web viewer.

Ideal for a broad spectrum of applications including:

· Remote monitoring of building performance
· Multi site storage facilities audit
· Conservation and collections cluster of buildings
· Historic house refurbishment projects
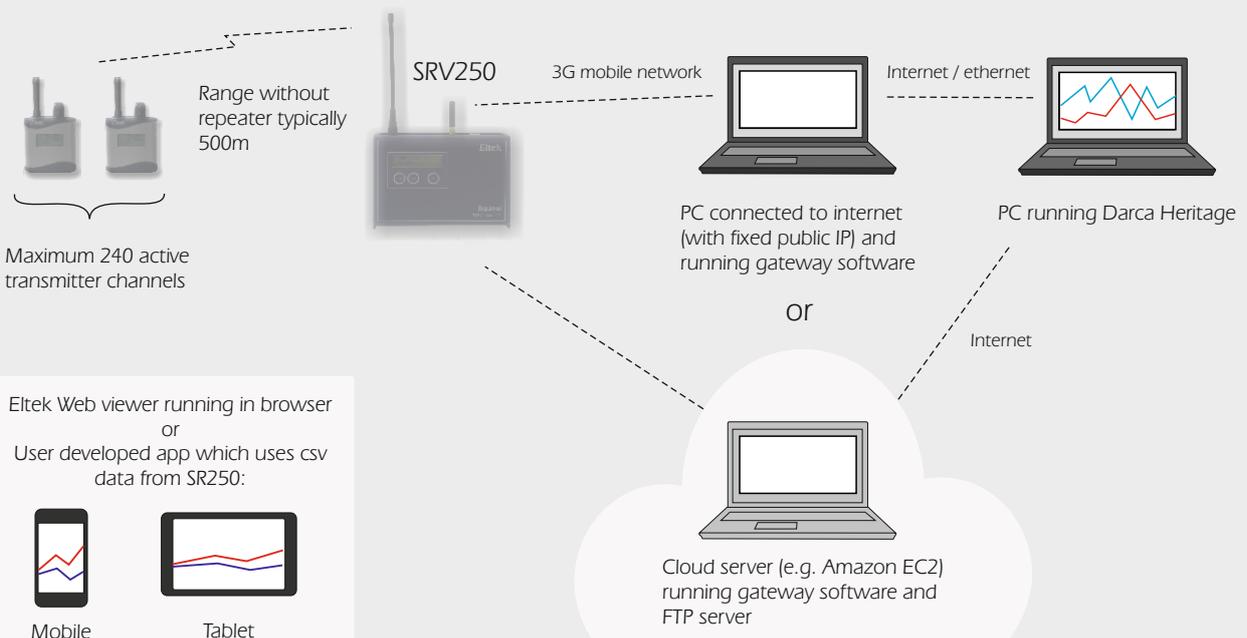· No geographical restrictions!

SRV250 features

· Compact single box solution: built-in 3G, battery back-up and 250,000 readings fall back logging.
· 24 hour back up battery should AC supply fail
· Button panel and LCD for metering, transmitter battery view, system diagnostics and test
· Panel mounted push-push socket to latch/unlatch Standard SIM
· Optimised data packet protocol providing cost effective use of SIM
· Text messaging for channels in alarm
· Supplied with free Gateway software.
· Optional accessories include Moxa Ethernet/internet adaptor

GenII system snap-shot

Radio Telemetry offers a cost effective and practical monitoring and alarm system 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 metres. Range can be easily extended to cover large areas by strategic placement of repeaters.

System configuration

SRV250

Range without repeater typically 500m

3G mobile network

Internet / ethernet

Maximum 240 active transmitter channels

PC connected to internet (with fixed public IP) and running gateway software

PC running Darca Heritage

or

Internet

Eltek Web viewer running in browser
or
User developed app which uses csv data from SR250:

Mobile   Tablet

Cloud server (e.g. Amazon EC2) running gateway software and FTP server

SRV250

Principles of operation

SRV250 "pushes" data to the mobile network whenever a logging takes place. Provided the collection of the data has been setup at some location – either on a cloud server or on a physical PC connected to the internet – then data upload can take place. If the data collection point is unavailable, the SRV250 continues to log, storing data in its internal memory. When the data collection point is reconnected, the SRV250 automatically uploads all stored data and thereafter it returns to uploading data whenever a log takes place.

To allow the user to remotely monitor the system status, additional information such as transmitter battery levels and signal strengths is also uploaded every 24 hours at midnight.

GPRS Gateway

The Eltek Gateway program runs on a host computer under Windows at a fixed public IP. It receives the data pushed by the SRV250 and stores it in a file at a location accessible by the host computer. The file format is selectable as Windows CSV or Eltek DAT.

The Gateway is designed to collect data from any number of SRV250 receiver loggers, each giving rise to its own data file. The SRV250 only communicates with the remote Gateway when it has data to send.

Specification

Receiver frequency:	434.225mHz, 914.5mHz, for other frequencies refer to Eltek
Sensitivity:	-117dBm
Environment:	temperature (-10 to +55)°C, RH up to 95% non condensing
Power requirement:	12VDC (500mA max), used with Eltek MP12U AC100/250 50/60Hz power supply
Built in batteries:	7.2Vdc NiMh - for 24 hour operation should AC supply fail
Dimensions:	(D65 x W120 x H180) mm (excluding antennae)
Weight:	500g including batteries
Antenna connector:	SMA
Comms connector:	6 pin Mini Din (socket)
Data protocol:	proprietary RS232 to Eltek specification
GPRS:	Telit type UL865-EUD 3G
Antenna connector:	SMA
SIM:	Standard size SIM, 3G - (the SIM must be SMS enabled)
	Note: A SIM is NOT included.

SRV250 is supplied with SRV250 serial/USB lead, TX configuration lead, detachable UHF and 3G antenna, MP12U power supply and detailed user instructions.

CE

QMS

ISO 9001
REGISTERED FIRM

Eltek