CaTeC

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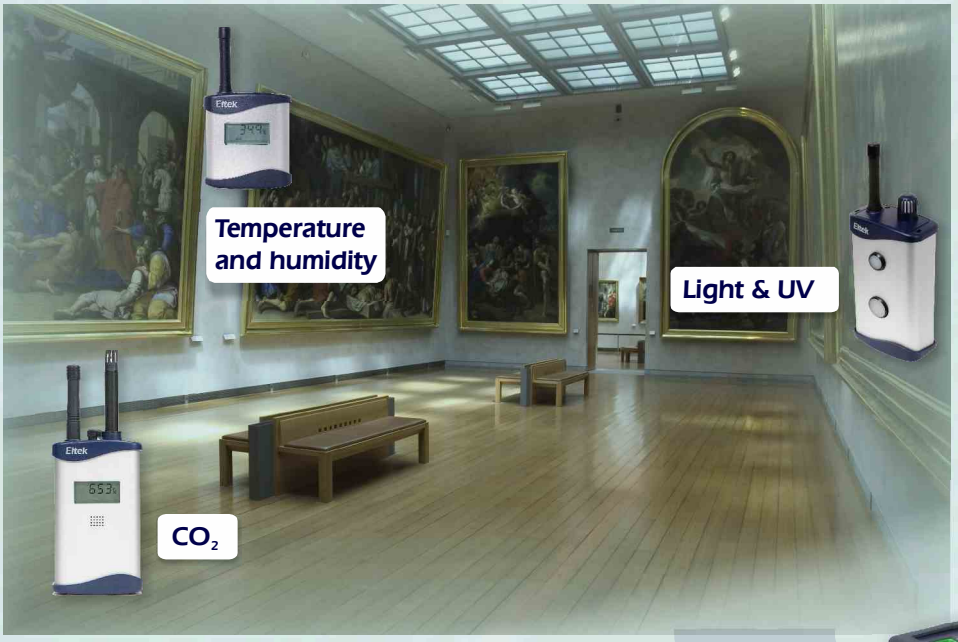
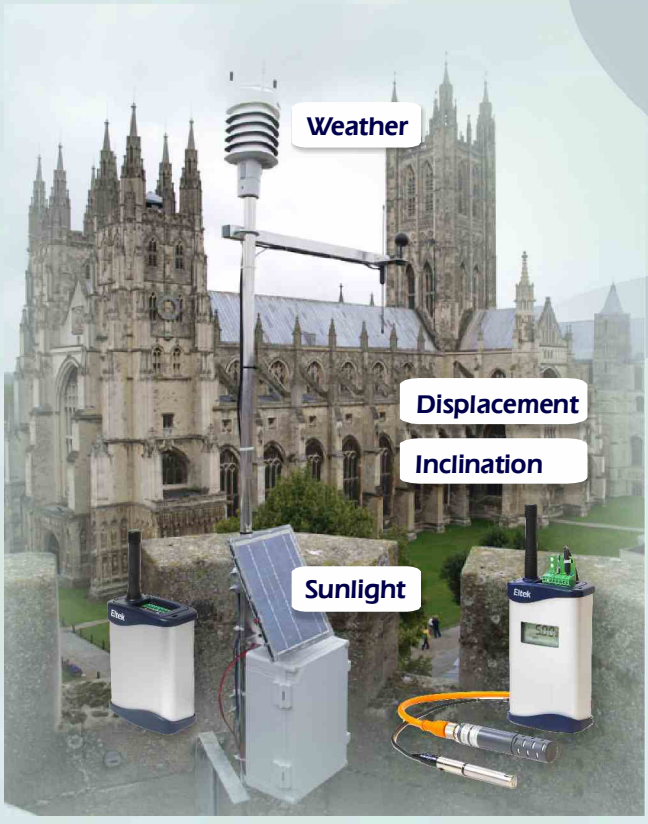
GENII HERITAGE MONITORING AND ANALYSIS

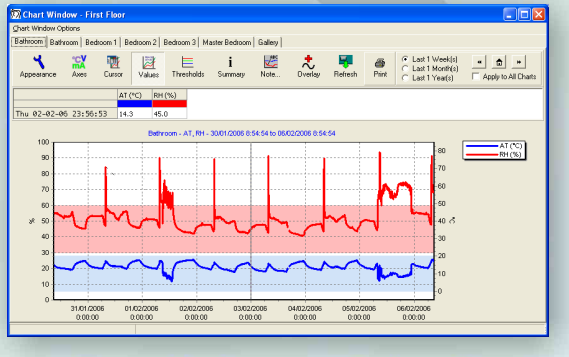
The Eltek GENII Heritage monitoring and analysis system has been designed specifically for the requirements of museums, libraries and conservation studies. Wireless technology is used to gather data from multiple sensors and transmit the information back to a central data logger. The system does not rely on a PC for data storage.

The Darca Heritage software is a comprehensive software tool for data manipulation, graphing and statistical analysis. Designed for curators, conservators and collection managers who require the ability to graph data over many years, the software allows the user to perform comparative studies over time and model changes in the environment.



RX250AL
Collects and stores data





Darca Heritage analysis software

GENII TELEMETRY TRANSMITTERS

Temperature and humidity

Built-in temperature
GC-06

Built-in temperature and humidity
GC-10, GD-10

External temperature and humidity
GD-13
inputs for Eltek RHT10D, Rotronic or E plus E RH/T probe.
GD-14
As GD-13 plus 2 x thermistor temperature inputs

Temperature

Thermocouple T or K
GD-20 / GS-20 series
1 or 4 inputs

Thermistor
GD-30 / GS-30 series
1, 2, 4 or 8 inputs

Platinum resistance
GD-52 / GS-52
2 inputs

Temperature, humidity and CO_2

All in one air quality monitor
GD-47
- CO_2 (0 to 5000ppm)
- RH (0 to 100%)
- Temperature (-10 to 65°C)
- All sensors built-in
- Mains operation with built-in rechargeable batteries

Visible and UV light

Built in ultraviolet and visible light with temperature and humidity
GL-70

External ultraviolet and visible light with temperature and humidity
GD-72 + LS70 + RHT10D

External visible light with temperature and humidity
GD-72 + LS50

Voltage / current

Inputs for voltage or current
GS-42 / GS-44
2 or 4 Voltage/current inputs with sensor supply

Pulse, digital state

Event or state inputs - Volt free or digital
GC-60 (2 inputs)
GS-61 (8 inputs)

Pulse inputs - Volt free or digital
GC-62 (2 inputs)

TMET weather

3 Inputs:
- Serial input for Vaisala WXT520 weather or WMT50 weather sensor*
- Voltage input or input for Delta T, Skye Instruments or Kipp and Zonen pyranometer
- Thermistor temperature input

RHT10D temperature & humidity probe

Temperature and humidity probe designed for use with:
GD-13E, GD-14E, GD-47
GL-72

GENII RX250AL RECEIVER / LOGGER

The RX250AL Receiver logger is the heart of a GenII logging system. It is not necessary to have a PC permanently connected and the built in battery means data logging is not interrupted if there is a temporary AC mains failure. Multiple Loggers can be used for wide area coverage. Alarms (including SMS alarms) come as standard. (To use SMS alarms, a GSM modem is required).

RX250AL

- Data Logger with integral receiver
- Alarm and GSM text output
- 24 hour built-in standby battery
- 247K readings expandable to 2M readings
- Dual RS232 serial ports
- Up to 250 channels
- Up to 125 transmitters
- Communication options: USB, GSM and Ethernet

Transmitters

- Available with or without LCD display
- Transmitters with up to 8 inputs
- Sensors can be integral, external or a combination of both
- Inputs available for Voltage, Current, Temperature, Pulse, Digital or Light
- Powered by standard alkaline batteries
- Up to 5 year battery life (30 minute logging interval)

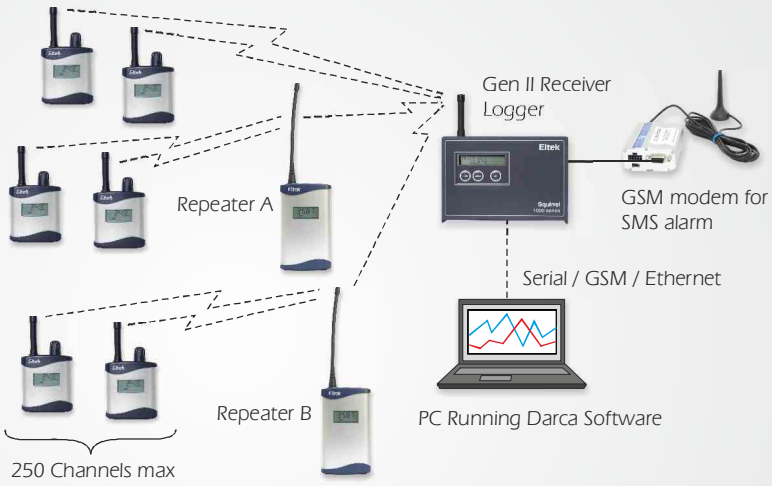
GENII RP250GD REPEATER

The RP250GD receives and rebroadcasts signals from GenII transmitters, significantly extending the distance over which a system can operate. Multiple repeaters can be used in a system.

Features

- Contains high performance receiver and transmitter compliant to EN 300-220
- LCD indicates on-air transmitter identity, status and signal strength
- Extends range of transmitters many fold
- Multiple repeaters can be used, enabling difficult sites to be covered easily
- Mains powered with built-in rechargeable batteries to provide up to 48 hours standby in the event of a mains failure.
- Antenna socket permits use of external antenna to improve performance in difficult conditions
- Software is used to configure the repeater and download transmitter activity data.

SYSTEM CONFIGURATION



Typical System Configuration

Radio Telemetry Logging System Features

- Wireless connection of sensors
- 12 bit resolution for high accuracy
- 250 channel system capability
- Easy system design and installation
- Range easily extended by Repeaters
- Tamperproof wall mounting brackets
- Transmitter battery alarm
- Display and keypad for "on line" metering
- Darca setup, graphing and data export software
- Extensive communications options

GENII TRANSMITTER SPECIFICATIONS

Models	Sensors	Range	Resolution	Accuracy
GD-06	built-in temperature	-15 to 40ºC -30 to 65ºC	0.1ºC 0.2ºC	±0.3ºC ±0.5ºC
GC-10/GD-10	built-in temperature built-in RH	-30 to 65ºC 0-100%	0.1ºC 0.1%	±0.4ºC (+5 to +40ºC) ±1.0ºC (-20 to +80ºC) ±2% (10 to 90%RH) ±4% (0 to 100%RH)
GS-13E/GD-13E	external RH (RHT10D) external temperature (RHT10D)	0-100% -40 to +85ºC	0.1% 0.1ºC	±2% (10 to 90%RH) ±4% (0 to 100%RH) ±0.4ºC (+5 to +40ºC) ±1.0ºC (-20 to +80ºC)
GD-14E	external RH (RHT10D) external temperature (RHT10D) 2 x external thermistor temperature	As GS-13E As GS-13E As GC-12		
GS-21/GD-21	1 x external T or K type thermocouple temperature	-200 to 200ºC	0.1ºC / 0.2ºC	±0.3ºC
GS-24/GD-24 GD-21AL/GD-24AL	4 x external T or K type thermocouple temperature / state inputs As GD-21/GD-24 with audible and visual alarm.			
GS-31/GD-31 GS-32/GD-32	1 x external thermistor temperature 2 x external thermistor temperature	-50 to 150ºC	0.1ºC (-25 to +100ºC) 0.2ºC (-40 to +125ºC)	±0.2ºC (-25 to +100ºC) ±0.4ºC (-40 to +125ºC)
GS-34/GD-34	4 x external thermistor temperature			
GS-38/GD-38	8 x external thermistor temperature / state inputs			
GS-42 GS-44	2 x external voltage or current 4 x external voltage or current (GS-44 with averaging function) other ranges available - refer Eltek	0-1V DC 0-10V DC 0-20mA DC 4-20mA	0.25mV 2.5mV 5µA 0.05%	±0.5mV ±5mV 20µA 0.1%
GS-52/GD-52	2 x 2 or 4 wire Pt100 temperature	-100 to 200ºC	0.1ºC	±0.3ºC
GC-60	2 x state indications			
GS-61	8 x state indications			
GL-70	1 x built-in temperature and RH 1 x visible light 1 x UV light	As GC-10 0-4,000 Lux 0-200 KLux 0-5000 mW/m² or 0-10,000 µW/Lumen	 0.1Lux 0.01KLux	
GD-72	1 x external temperature and RH 1 x external visible light (LS50 or LS70) 1 x external ultraviolet (LS70 only)	As GD13 As GL-70 As GL-70		
GD-47	1 x built-in temperature and RH 1 x built-in CO_2	As GC10 0-5000ppm		

RX250AL data logger

Ambient temperature	-10 to +55ºC
Humidity	Up to 95% (non condensing)
Power supply	12V DC at 500mA powered using type MP12U, (input 100-250V AC)
Built-in batteries	6 x AA Ni Mh battery
Dimensions	D 60mm x W 180mm x H 120mm
Weight	1Kg inc. batteries

RP250GD repeater

Ambient temperature:	-10 to +55ºC
Humidity:	Up to 95% (non condensing)
Power supply	12V DC (Type MP12U, 100-250V AC input)
Backup batteries type:	Ni MH pack
Backup battery life:	Typically 24 to 48 hours dependant on activity
Dimensions:	D 41mm x W 80mm x H 125mm
Weight:	500g inc. batteries

Transmitter

RF specification	EN300-220, 10mW
UHF frequency	434.225 MHZ
Range	200 ->1000 metres dependent upon environment.
Environment specification:	
Compliant to EN300-220	-10 to +55ºC
Actual	-30 to +65ºC
Humidity	100% non condensing
Environmental rating	IP40
Dimensions (footprint)	78 x 41mm
Battery endurance	up to 5 years (interval set to 5 minutes) (less for GL-70 and GS-40 series)
Transmission interval range	1 sec to 4 hours
Indicator (red LED)	transmit active/on/off
Control switch (concealed)	test mode / hibernate

TD1100 11/03/13

Guarantee Equipment manufactured by Eltek is guaranteed against faulty materials or workmanship for three years. For repairs carried out under guarantee, no charge is made for labour, materials or return carriage.

ISO 9001
REGISTERED FIRM

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