

# GENII TELEMETRY TRANSMITTERS

# Eltek

SPECIALIST  
DATA LOGGERS

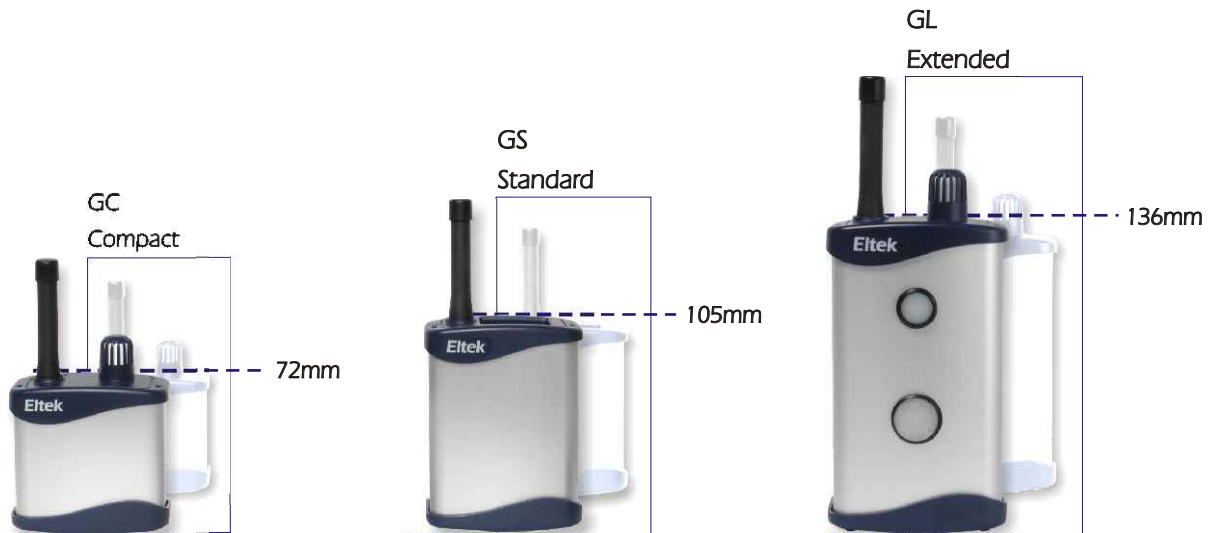
Easy to use customised data loggers

The Eltek GenII series is a new range of telemetry products providing reliable radio data logging for a wide range of users and applications. Sensors can be located almost anywhere, giving a system which is simple to install and use.

Eltek's telemetry transmitters are designed to complement each other, sharing a common case style, RF specification, battery system and choice of antennas.

They offer an unequalled range of input types that includes temperature, humidity, light, voltage, current, differential pressure and other customised inputs. This choice gives the system-designer a ready solution to a diverse range of applications.

## Case Types



## Common Specifications

RF specification	EN300-220
RF Power	10mw
Environment specification:	
Compliant to EN300-220	-10 to +55°C
Actual	-30 to +65°C
Humidity	Up to 95% non condensing
Environmental rating	IP40
Dimensions (footprint)	78 x 41mm
Height and Weight	(Model dependant)
Battery endurance	> 5 years (interval set to 5 minutes)
Transmission Interval range	1 sec to 4 hours
Indicator	Transmit active
Controls (concealed)	On/Off Test mode
Antenna socket	SMA
Tamper resistant wall bracket available.	

## Transmitter Types Available

### Built in sensors

GC-05	1 x temperature
GC-10	1 x temperature and 1 x humidity
GL-70	1 x temperature, 1 x humidity, 1 x ultraviolet and 1 x visible light
GS-84	1 x temperature, 1 x humidity and 1 x differential air pressure.

### Combination of built in and external sensors

GS-11	Built in temperature and humidity with input for 1 x external thermistor probe
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### Inputs for external temperature probes

Thermocouple inputs (type K or T)	
GS-21	1 x input
GS-24	4 x inputs
Thermistor inputs	
GS-31	1 x input
GS-32	2 x inputs
GS-34	4 x inputs
GS-38	8 x inputs
RTD (Pt100 platinum resistance inputs)	
GS-51	1 x input
GS-52	2 x inputs

### Inputs for combination temperature and humidity probes

GS-13	2 inputs, use with Rotronics Hygroclip or Eltek RHT10-D temperature and humidity probe
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### Inputs for voltage and current

GS-41	1 x input
GS-42	2 x inputs
GS-44	4 x inputs

### Mixed input transmitter

GS-43	1 x voltage or current and 1 x temperature (thermistor)
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## RHT10-D Probe



### Dimensions

Diameter	10mm
Length ex. Connector	66mm
Lead	1M to 5M
Powered from	TX

The Eltek RHT10-D is a compact, stainless steel, precision humidity and temperature probe. A detachable probe head houses a calibrated sensor. Up to 5 m cable. Designed for use with the Eltek GS-13 telemetry transmitter.

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Please also see section 'Common Specification' overleaf.

## Built-in Temperature

### GC-05

Built-in temperature

Range: -30 to +65°C  
Resolution: 0.1°C  
Accuracy: ±0.5(-10 to +55°C)

### GC-10

Built-in temperature and humidity

#### Temperature

Range: -30 to +65°C  
Resolution: 0.1°C  
Accuracy: ±0.4°C(+5 to +40°C)  
±1.0°C(-20 to +80°C)

#### Relative Humidity

Range: 0-100%  
Resolution: 0.1%  
Accuracy: ±2%(10 to 90%Rh)  
±4%(0 to 100%Rh)

### GS-11

Built-in temperature and humidity and input for thermistor temperature

Temperature (thermistor) as GS-31  
Temperature and humidity as GC-10



## External Temperature

### GS-21 and GS-24

External thermocouple temperature

Type: K or T  
Range: -200 to 200°C  
Resolution: 0.1°C/0.2°C  
Accuracy: ±0.3°C



### GS-31, GS-32, GS-34 and GS-38

External thermistor temperature

Range: -50 to +150°C  
Resolution: 0.05°C (-5 to +75°C)  
0.1°C (-25 to +100°C)  
0.2°C (-40 to +125°C)  
Accuracy: ±0.1°C (-5 to +75°C)  
±0.2°C (-25 to +100°C)  
±0.4°C (-40 to +125°C)



### GS-51 and GS-52

External platinum resistance temperature

Type: Pt100 2 or 4 wire  
Range: -100 to 200°C  
Resolution: 0.1°C  
Accuracy: ±0.3°C



## Voltage and Current

### GS-41, GS-42 and GS-44

Inputs for voltage or current

Range	Accuracy	Resolution
0-1V DC	±0.5mV	0.25mV
0-10V DC	±5mV	2.5mV
0-20mA DC	20uA	~5uA
4-20mA	0.1%	0.05%

Excitation: 12 or 5V DC at 50mA maximum (internally selectable)



### GS-43

Voltage or Current and temperature inputs

Voltage or current as GS-41  
Temperature (thermistor) as GS-31

## Light

### GL-70

Built in ultraviolet and visible light with temperature and humidity

Temperature and humidity as GC-10  
Visible Light:  
Range: 0-4,000 Lux (resolution 0.1Lux)  
0-200 KLux (resolution 0.01Klux)  
Ultra Violet light:  
Range: 0-5000mW/M<sup>2</sup>  
0-10,000µW/Lumen



## Pulse / Event

### GS-62

Pulse or event inputs - Voltage free or digital

Pulse width: >500uS  
Digital high/low: >4V/<1V  
Max pulse rate: 250Hz  
Max pulse count: 2<sup>16</sup> (65,535)



## Air Pressure

### GS-84

Built-in differential air pressure with temperature and humidity

Temperature and humidity as GC-10  
Differential air pressure: 0-50-500 Pascal (typically 1% error)

Illustrations not to scale.



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