

WOLF LABORATORIES

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Transmitters

The Eltek range of transmitters

GenII transmitters have been designed to work with many types of external of sensors to meet the requirements of a wide range of applications. Inputs for temperature, humidity, voltage/current (e.g.4-20mA) visible light, UV, event and pulse are already catered for (See the table below). In addition transmitters can have in-built sensors such as humidity and/or temperature only, light and differential air pressure.

Eltek offers a built-in 4 digit LCD for most transmitters. For transmitters with multiple inputs, the LCD scrolls through the inputs indicating engineering units with the reading. The 10mm high characters assure a wide viewing angle.

Transmitters are attractively styled and extremely rugged using a drawn aluminium case. A built-in wall bracket with anti tamper features means the unit can be discreetly mounted if needed – ideal for incorporation in an exhibit case or factory production area. Versions are also available for outdoor use.







A brief summary of the models is listed below. If the version you require is not listed please contact Eltek as it may already be in development, if not we will be pleased to discuss finding a solution for you.

Model No.	Built-in Temperature	
GC-05/GD-05	Built-in Temperature	
Range -30 to +65°C	Resolution 0.1°C	Accuracy ±0.5°C
GC-10/GD-10	Built-in Temperature and Relative Humidity	
Range Temperature: -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: 0-100%	Resolution 0.1%	Accuracy ±2%(10 to 90%Rh) ±4%(0 to 100%Rh)
GD-11	Built-in Temperature and Relative Humidity Input for Thermistor Temperature	



Built-in temperature and humidity as GC-10.
Thermistor temperature as GC-12.



Model No. (Inputs)	External Temperature	Image
GC-12	Basic external Thermistor Temperature Range: -40 to +70°C Resolution: 0.1°C (-15 to +40°C) 0.3°C (-36 to +70°C) Accuracy: ±0.2°C (-15 to +40°C) ±0.6°C (-36 to +70°C)	
GS-21/GD-21 GS-24/GD-24	External Thermocouple Temperature (K/T) Type: K or T Range: -200 to 200°C Resolution: 0.1°C/0.2°C Accuracy: ±0.3°C Note: thermocouple connectors are not included.	
GD-21AL	External Thermocouple Temperature (K/T) with built – in audible and visual alarm As GS-21	
GD-24H	External Thermocouple Temperature (K) Type: K Range: -200 to 1200°C Resolution: 0.5°C Accuracy: ±0.3°C	
GS-31/GD-31 GS-32/GD-32 GS-34/GD-34 GS-38/GD-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)	
GD-52 GD-52H	External Platinum Resistance Temperature Type: Pt100 2 or 4 wire Range: -100 to 200°C (GD-52), 0 to 300°C (GD-52H) Resolution: 0.1°C Accuracy: ±0.3°C	

Model No.	External Temperature and Humidity
GS-13E/GD-13E	Inputs for Combination Temperature and Humidity probe Combination input for Eltek RHT10-D temperature and humidity probe
GD-14E	Input for Combination Temperature and Humidity probe and 2 inputs for Thermistor Temperature As GS-13 (above) with additional inputs for 2 external thermistor probes (As GC-12).

GD-14R

Input for Combination Temperature and Humidity probe and 2 inputs for Thermistor Temperature

Combination input for Rotronic Hydroclip S probe:

External RH

Range: 0-100%, Accuracy: At 23°C ± 1.5%rh

Temperature

Range: -40 to +85°C, Accuracy: At 23°C ± 0,3K

Plus additional inputs for 2 external thermistor probes (As GC-12).

Model No. (Inputs)	Voltage and Current
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GS-42
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 DC	0.1%	0.05%



Model	Light
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GL-70

Built in Ultraviolet and Visible Light with Temperature and Humidity

Temperature and humidity as GC-10

Visible Light

Ultra Violet light

Range:

0-4,000 Lux

(**Resolution:** 0.1Lux)

0-200 KLux

(**Resolution:** 0.01KLux)

Range:

0-5000mW/M²

0-10,000µW/Lumen



GS-71

External Ultraviolet and Visible Light with built in Temperature and Humidity

Temperature and humidity as GC-10.

For use with LS-70 Light and UV sensor

Visible Light

Ultra Violet light

Range:

0-4,000 Lux

(**Resolution:** 0.1Lux)

0-200 KLux

(**Resolution:** 0.01KLux)

Range:

0-5000mW/M²

0-10,000µW/Lumen



GS-72

External Ultraviolet and Visible Light with external Temperature and Humidity

For use with Temperature and humidity probe

RHT10-D and LS-70 light and UV probe.

Visible Light

Ultra Violet light

Range:
 0-4,000 Lux
 (**Resolution:** 0.1Lux)
 0-200 KLux
 (**Resolution:** 0.01KLux)

Range:
 0-5000mW/M²
 0-10,000µW/Lumen



Model No. (Inputs)	Pulse & Event
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GC-60	State inputs
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2 state indications

GS-61	State inputs
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8 state indications

GS-62 GS-62a	Pulse inputs - Voltage free or digital
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Pulse width: >500uS
 Digital high/low: >2.5V/<1V
 Max pulse rate: 250Hz
 Max pulse count: 216 (65,535)

The 'a' suffix indicates inverted logic.

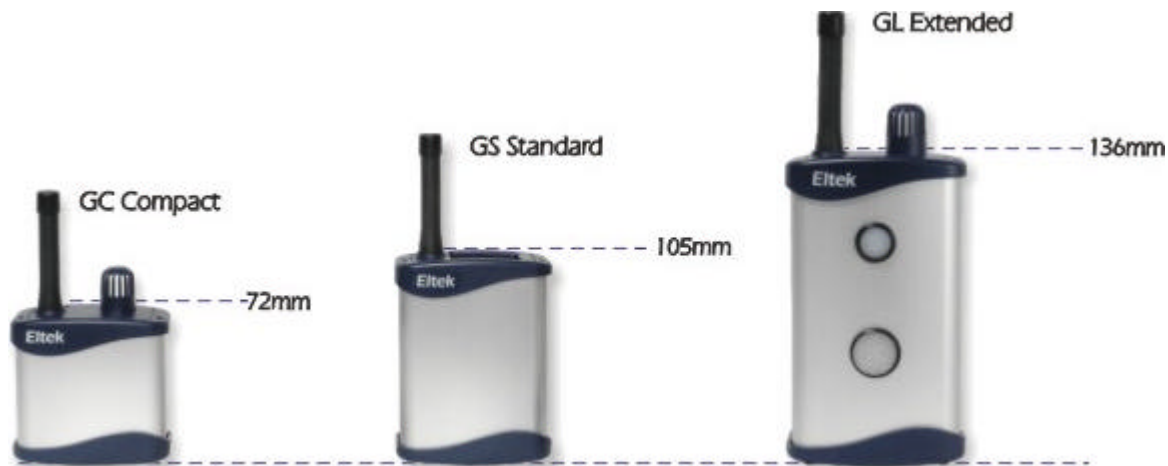


Model No.	Air Pressure
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GS-84	Built-in Differential Air Pressure with Temperature and Humidity
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Temperature and humidity as GC-10
 Differential air pressure: 0-50-500 Pascal (typically 1% error)

Case Heights



The system allows for up to 250 sensors to be connected across 125 transmitters. Typically, transmitters have 1,2,3 or 4 sensor input capability, however up to 15 sensors is possible. Note that just one transmitter can provide a cost effective system.

For detailed specifications please download the [data sheet](#).

Calibration

GenII transmitters with internal sensors have been designed for easy calibration. The use of plug-in sensors means that calibrated sensors can simply be exchanged on site. This reduces system down time, disruption and ultimately cost.

Transmission

The transmitters send very brief data packets in time at user-defined, pre-set intervals. It is normal to send several transmissions during the logging interval to allow for the unlikely event that two transmissions from separate transmitters may clash. The "on air" time is extremely low and the transmitter sleep current is also very low, so that the batteries in GenII transmitters have exceptionally long life, more than 5 years without forfeiting accuracy or reliability.

Each transmitter battery voltage is monitored by the central Receiver Logger, so the user can easily check out "% battery remaining". An alarm is raised when battery replacement is imminent.

Additionally, a system reliability indicator at the Receiver Logger shows whether a good radio connection is available.