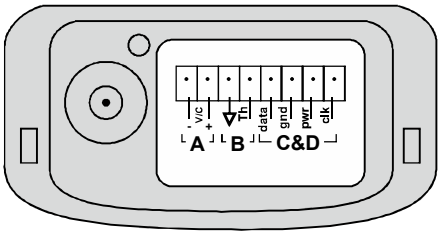
# Eltek TU1041 - GD43JA used with NRLite

The GD43JA provides 3 physical inputs:

- ✂ A bi-polar voltage input for use with the Kipp and Zonen NRLite Net radiometer.
- ✂ A thermistor temperature input
- ✂ A digital input for use with the EE08 RH and temp probe (2 channels)

## Connections




**Channel A**: Range -15mV to +15mV with scaling.
Use with Kipp and Zonen NRLite Net radiometer.
NTLite provides a summed output from the two sensors used.
NRLite connections: Connect red wire to "+"
Connect black(screen) and blue wires to "-"

**Channel B**: Thermistor temperature input with range -50 to +150 degree C.

**Channels C, D**: These channels are the digital signal and power for the EE08 RH and temperature probe:
**Channel C** is presented to the logger as the temperature sensor of the EE08.
**Channel D** is presented to the logger as the RH sensor of the EE08.

## Setting the EU range for NRlite in Darca's Transmitter Setup

Channel A transmitter input range is +/-15mV.
Look up the calibrated output value of $\mu V/W/m^2$ provided with the NRLite.

Use the formulae: 15mV / NRLite value of $\mu V/W/m^2$ to calculate the full range value.
Example: if the NRLite calibration value is 11.2 $\mu V/W/m^2$,
the range equates to +/- 1339$W/m^2$.
In **EU Range selector : Channel A** (Do not use Helper!)
Set **maximum** to 1339
Set **minimum** to 1339 and then (and only then) insert the - sign
Set **units** to Wm2
Set **decimal point** to 0
Click **OK**
Now change the **Range** drop down for channel A from **+/-15mV** to **EU** range and click **Set Channel.**

Note: When renewing batteries (and especially if transmitter is no longer operating), you should allow one minute with no batteries connected before installing new batteries. This is to ensure transmitter performs a power on reset.