

# EL-SGD 43-ATP

Four-Channel Temperature Data Logger with 4.3" Capacitive Touch Display



EL-SGD 43-ATP is a four-channel temperature data logger with real-time readings, trend graphing and data analysis tools.

The EL-SGD 43-ATP is a four-channel temperature data logger based on Lascar's PanelPilotACE platform. The product includes a 4.3" panel mounted display module with capacitive touch screen, a four-channel thermistor temperature board and compatible temperature probes. The user interface comprises an advanced logging application which shows real-time readings for up to four temperature channels, live trend graphs and access to a suite of real-time data analysis information.

The logger can store up to 100,000 readings per channel at sample rates from 5 seconds up to 12 hours. Data can be downloaded via USB using Lascar's free Device Utility software, which is available from [www.lascarelectronics.com/software/panelpilotace](http://www.lascarelectronics.com/software/panelpilotace).

For advanced users, the interface can be extensively customised using Lascar's free drag-and-drop PanelPilotACE Design Studio software.

Each EL-SGD 43-ATP includes:

- 4.3" PanelPilotACE display with mounting kit (SGD 43-A)
- Four-channel thermistor add-on board (S43-TP)
- 4 x 1m thermistor probe with 3.5mm plug (EL-P-TP)
- Mini USB cable (CABLE USB A-MF)

## Specifications

|                                  |   |
|----------------------------------|---|
| Supplied probe measurement range | -40°C to +125°C (-40°F to +257°F)           |
| Internal Resolution              | 0.01°C (0.01°F)                             |
| Temperature Accuracy             | ±1.0°C (±1.8°F)*                            |
| Number of Readings (per channel) | 100,000                                     |
| Logging Rate                     | 5 seconds to 12 hours                       |
| Number of Channels               | Up to 4                                     |
| Outside Dimensions               | 119.3 x 79.8 x 31.3 mm (4.7 x 3.1 x 1.2 in) |
| Communications Protocols         | USB   |

\* Between -5°C and 40°C without offset calibration. Between -40°C and +125°C with offset calibration applied.

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## Operating Modes

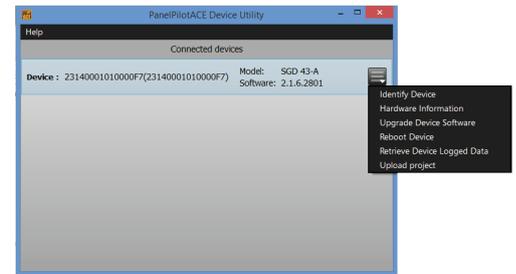
The EL-SGD 43-ATP can be configured for one, two, three or four channel temperature data logging in either celsius or fahrenheit.

| Function  | 3.5mm SKT | Configuration                  |
|-----------|-----------|--------------------------------|
| Channel 1 | NTC1      | 1, 2, 3 or 4 channel operation |
| Channel 2 | NTC2      | 2, 3 or 4 channel operation    |
| Channel 3 | NTC3      | 3 or 4 channel operation       |
| Channel 4 | NTC4      | 4 channel operation only       |

## Software

### Device Utility

Data download, device updates and programming of the module is completed using the free Device Utility software available from [www.lascarelectronics.com/software/panelpilotace](http://www.lascarelectronics.com/software/panelpilotace). Data is downloaded in comma separated variable format which can be imported into spreadsheet packages for graphing and further analysis.

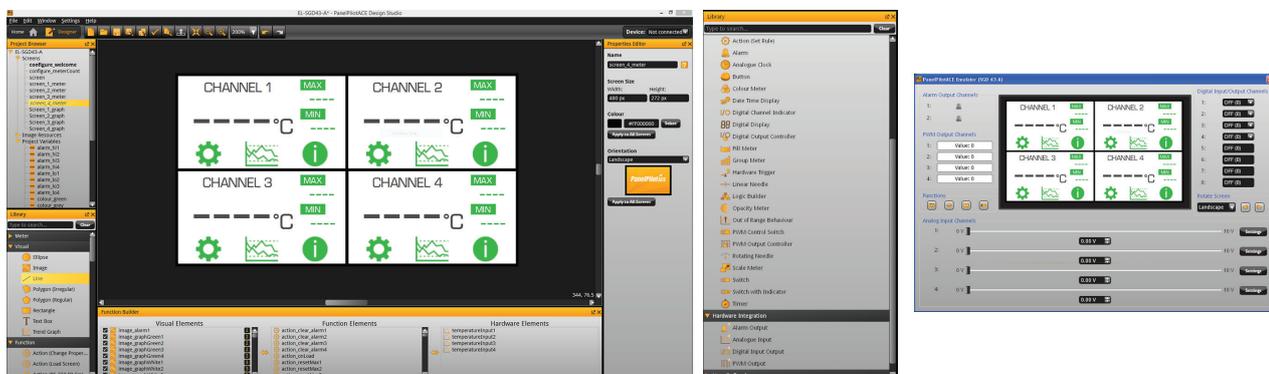


### Retrieving Logged Data

The EL-SGD 43-ATP is configured as a USB slave. To retrieve logged data, connect a PC or laptop to the USB connector on the rear of the unit and use the Device Utility software to select and extract logs as .txt files.

### Design Studio Software

The PanelPilotACE Design Studio software provides tools for advanced users who wish to fully customise the data logging functionality of the module. Visit [www.lascarelectronics.com/software/panelpilotace](http://www.lascarelectronics.com/software/panelpilotace) or [www.youtube.com/panelpilot](http://www.youtube.com/panelpilot) for further information including learning materials on getting started with this powerful drag-and-drop software suite.



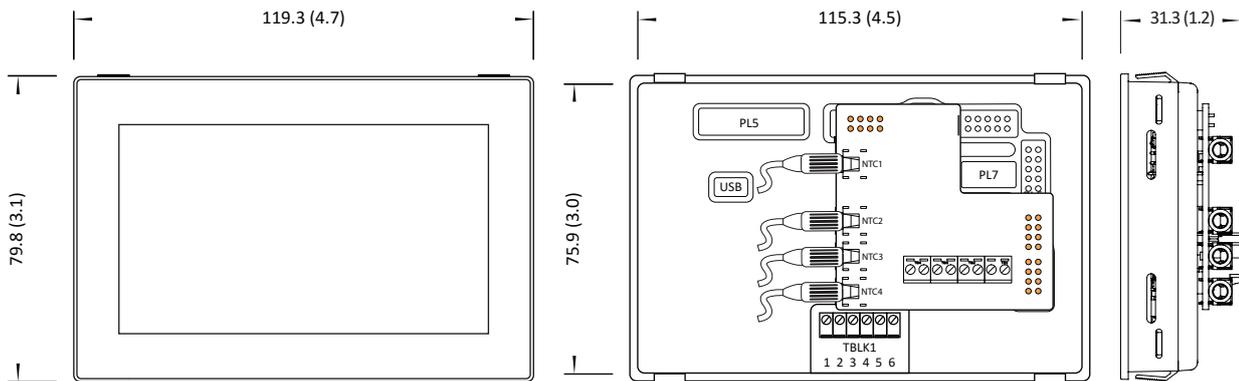
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## Dimensions and Mounting

All dimensions are in mm (in)



The orange colour pins on the rear elevation (above-middle) show the correct location for the S43-TP temperature board.

## Panel Cut-Out and Fitting

The panel cut-out is 117.0 x 78.0mm (4.6" x 3.07").  
There are two mounting methods:

The first uses clips that protrude from the plastic assembly and is suitable for panels between 1 and 3mm (0.04" and 0.12") in thickness.

The second method uses a rear mounting plastic bracket featuring grub screws for a more secure and adaptable fit. This second mounting method is suitable for panels between 0.5 and 4.0mm (0.01" and 0.15") in thickness.

