

F600 is a new series of high performance resistance thermometry bridges from ASL that is unique in offering the latest technology in both AC and DC measurement. Integrity in measurement has always been a hallmark of ASL instruments and F600 continues that tradition. However, now you have an even lower frequency AC bridge, or switched DC measurement technology to choose from, according to your needs.

- Accuracy: up to  $\pm 0.5\text{mK}$
- Resolution:  $0.1\text{mK}$
- 25Hz / 30Hz or switched DC carriers
- Use with PRTs, & Thermistors (F600 DC only)
- 2 to 60 channels
- Large multi-function (VFD) display
- Measure and in ratio, ohms,  $^{\circ}\text{C}$ ,  $^{\circ}\text{F}$  or K



F600 is the first product from ASL that is available as an AC Bridge and as a DC instrument enabling you to choose the best suited to your application, or to compliment your existing equipment. The AC bridge now operates at the lower frequency of 25Hz (50Hz supply) or 30Hz where your power supply is 60Hz, while the DC version provides a switched DC sensor current to simulate the advantages of AC - AC bridges eliminate entirely the errors caused by thermal emf's\* in the probe or associated wiring.

F600 is easy of use and is versatile in operation. You can choose and save what information you want to display on-screen as an aid to efficient working. You can also choose to select or change functions, such as probe current, by a dedicated switch or from within the menu displayed on screen.

For multi-channel applications, F600 operates with ASL's existing switch box systems to allow system expansion to 60 channels.



|                        | F600 AC                                             | F600 DC                                                             |
|------------------------|-----------------------------------------------------|---------------------------------------------------------------------|
| Accuracy (ppm)         | ±2ppm of reading or 20 digits, whichever is greater | ±3ppm of reading or 30 digits, whichever is greater                 |
| Accuracy (temperature) | ±2.5mK over range, ±0.5mK at 0°C                    | ±4mK over range, ±0.8mK at 0°C                                      |
| Resolution             | 0.1mK                                               | 0.1mK                                                               |
| Range (ratio)          | 0 to 4.999 999 0                                    | n/a                                                                 |
| Range (ohms)           | 0 to 500                                            | 0 to 500K                                                           |
| Range (temperature)    | -260 to +962°C                                      | -260 to +962°C                                                      |
| Internal Ref. (ohms)   | 25 & 100                                            | 25, 100, 10K & 66K                                                  |
| Carrier Current (mA)   | 0.1, 0.2, 0.5, 1, 2, 5 & 10 +√2 multiplier          | 0.005, 0.01, 0.02, 0.05, 0.1, 0.2, 0.5, 1, 2, 5 & 10 +√2 multiplier |
| Carrier Frequency      | 25 or 30 Hz (50 or 60Hz supply)                     | Switched DC                                                         |
| Bandwidth              | 10, 5, 1, 0.1 & 0.01Hz                              | 10, 5, 1, 0.1 & 0.01Hz                                              |
| Comms Port             | USB                                                 | USB                                                                 |
| Supply Voltage         | 230, 220, 120, 100 VAC ±10%                         | 230, 220, 120, 100 VAC ±10%                                         |
| Supply Frequency       | 47 – 63 Hz                                          | 47 – 63 Hz                                                          |
| Service Temperature    | 0 to +40°C                                          | 0 to +40°C                                                          |
| Dimensions (mm)        | 150 x 455 x 450 (HxWxD)                             | 150 x 455 x 450 (HxWxD)                                             |

\* Thermal emf's are small voltages generated at junctions of dissimilar metals subjected to a thermal gradient that can cause errors by adding to the tiny measured voltage across the resistance thermometer.