FLOAT LINE THERMOMETER - FLT5A

In order to achieve consistent product quality on glass float lines, the temperature across the width of the glass must be kept as uniform as possible. This applies throughout the process: from the initial floating and forming in the bath, to the cooling and annealing sections in the lehr.

Accurate temperature measurement is vital in ensuring uniformity across the entire width of the glass. The new Land FLT5A is designed specifically for use in float lines. FLT5A measures glass surface temperature in the range 250 to 1100°C, with excellent precision and long-term stability.

Features
- 250 to 1100°C temperature range
- 4.8 to 5.2µm spectral response
- 50:1 optical field of view
- Compatible with full range of Land System 4 mountings and accessories
- Loop powered, 4 to 20mA output

In the past, Land has specified SOLO 5 instruments for float line applications. The FLT5A supersedes SOLO 5, offering improved performance from an appreciably more cost-effective and user-friendly package.

The FLT5A measures temperatures from 250 to 1100°C, reducing the number of different instruments on the line.

It has exactly the same spectral response as the SOLO 5 (4.8 to 5.2µm) - i.e. it has the same low "penetration" into the glass and the same insensitivity to atmospheric humidity.

The thermometer features 50:1 optics, fixed focus at 1 metre, with 98% energy guaranteed from within the 20mm target spot.

The thermometer is quickly demountable from a cooling jacket and is compatible with a comprehensive range of mountings and accessories, enabling use in the most hostile of environments.

The thermometer operates on a two-wire, 4 to 20mA current loop and is compatible with industry-standard indicators and recorders.
Continuous product development may make it necessary to change these specifications without notice.

**TYPICAL MEASUREMENT POINTS**

**SPECIFICATION**

- **Range**: 250 to 1100°C
- **Spectral response**: 4.8 to 5.2µm
- **Field of view**: 50:1 (98% energy) at 1m focus (fixed)
- **Output**: 4 to 20mA current loop
- **Response time (0-95%)**: 1 to 10 seconds adjustable
- **Emissivity adjustment**: 0.3 to 1.10 in 0.01 steps
- **Resolution**: 0.2°C
- **Stability**: 0.023% of span per 1°C change in ambient temperature
- **Accuracy (absolute)**: 0.5% T (K) + 1°C
- **Ambient limits**: 0 to 60°C specified; -10 to 80°C operating
- **EMC**: EN 50 082-2 (immunity); EN 50 081-1 (emission); IEC 1010 (safety)
- **Sealing**: to requirements of IP65/NEMA 4X
- **Vibration**: 3g (10 to 300Hz)
- **Power supply**: 12 to 45V d.c.

**SCHEMATIC DIAGRAM**

- Power supply unit
- 4 to 20mA

Continuously updated, product specifications may differ from this page. For the most current information, please visit our website.