

LAND

APPLICATION DEDICATED PRODUCT

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.

Photograph shows installation on a pattern glass plant



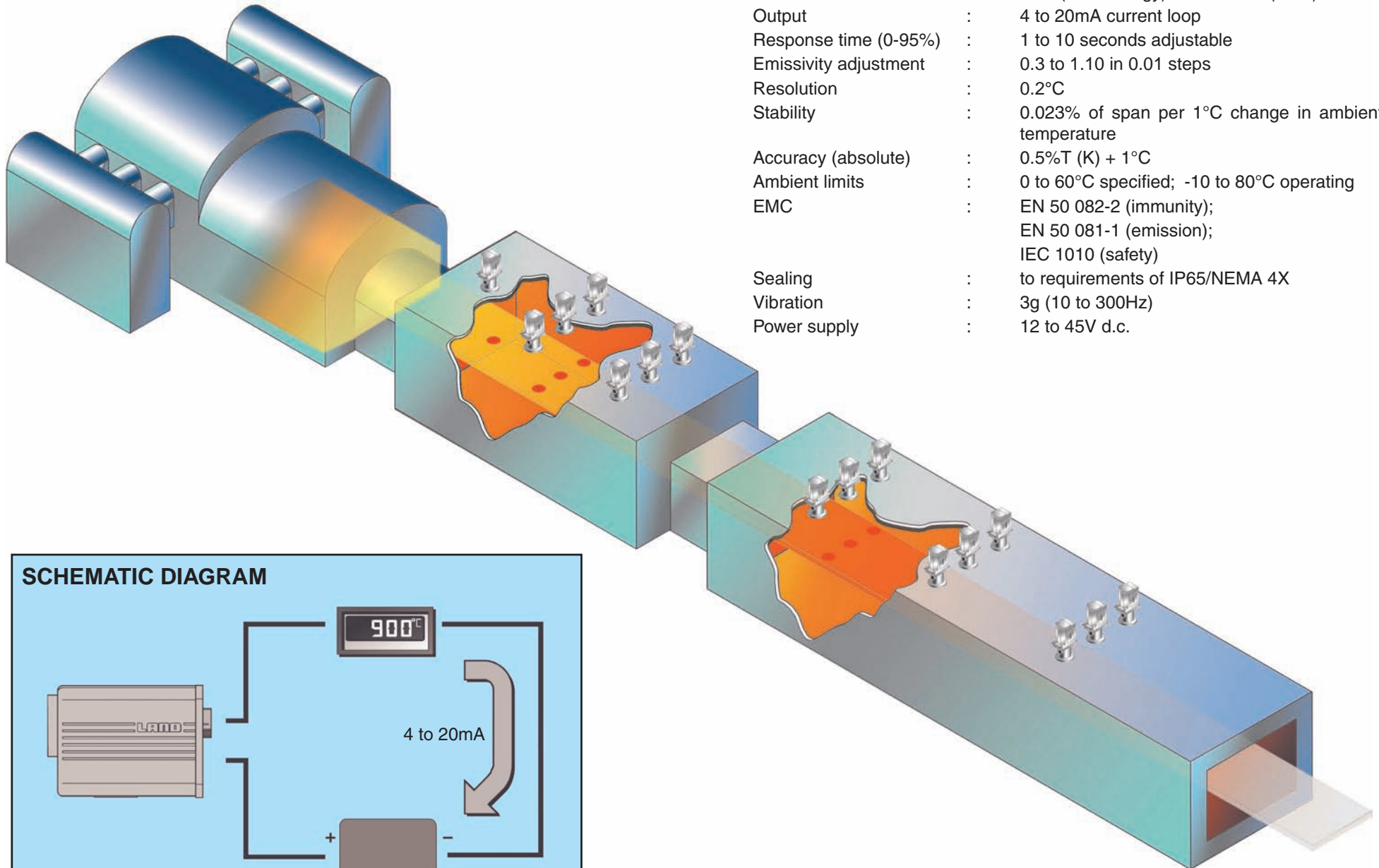
LAND

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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

