

PROCESS RELATIVE HUMIDITY AND TEMPERATURE TRANSMITTERS

SEM165

- DUCT MOUNTING
- HIGH TEMPERATURE
- RAPID RESPONSE
- ROBUST CONSTRUCTION
- ISOLATED
- OUTPUT RANGEABLE
- DISPLAY OPTION
- 5 YEAR WARRANTY

INTRODUCTION

The SEM165 has a stainless steel probe which offers excellent performance in harsh industrial process control environments and energy management applications.

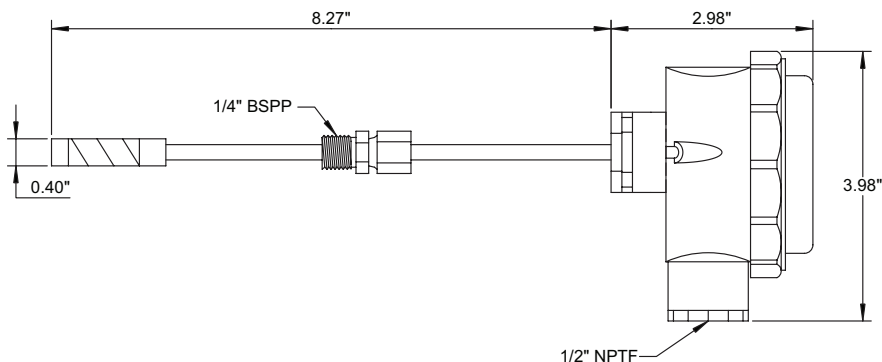
Of all the Relative Humidity transmitters we offer the SEM165 operates at the highest temperature -22°F to 284°F.

The single hole mounting via a 1/4" BSP compression fitting allows for simple installation into ducts, pipes or process chambers and facilitates adjustment of insertion depth.

The Status Instruments SCH4 connection head is rated NEMA 4X with a conduit connection of 1/2" NPTF.



MECHANICAL DETAILS



SPECIFICATIONS @ 68°F

GENERAL

Pressure Rating	400 psi Max.
Ambient Operating Range	-4°F to 131°F (-20°C to +55°C) 5 to 95% RH (non-condensing)
Supply Voltage	12 to 32 VDC (Nominal 24 VDC)
Connections	Screw Terminals

RELATIVE HUMIDITY

Sensor	Capacitive
Measurement Range	0 to 100% RH Wettable
Accuracy RH	± 2%
Hysteresis	<1%
Operating Temperature	-22°F to 284°F (-30°C to +140°C)
Response Time	<10 seconds
Linearity	± 2.5% (11% to 90% RH)
Output	4 to 20 mAdc (0 to 100% RH)
Output Load (Max.)	$\frac{(V \text{ supply} - 12)}{20}$ KΩ

TEMPERATURE

Sensor	Pt100
Measurement Range	32°F to 212°F (0°C to 100°C) (other options to order)
Accuracy Temperature	± 1.8°F
Output	4 to 20 mAdc (2-wire)
Output Load (Max.)	$\frac{(V \text{ supply} - 12)}{20}$ KΩ

APPROVALS

Emissions	BS EN 61326
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ORDER CODE:

SEM165	-22°F to 284°F RH/Temperature Transmitter
Accessories	
165NPT	1/4" female BSP to 1/2" male NPT Fitting

RELATIVE HUMIDITY AND TEMPERATURE BUTTON DATALOGGER



SL54TH

- COMPACT SIZE
- SELF CONTAINED SENSORS
- MEASURE RH & TEMPERATURE
- BATTERY OPERATED
- TempIT SOFTWARE COMPLIANT

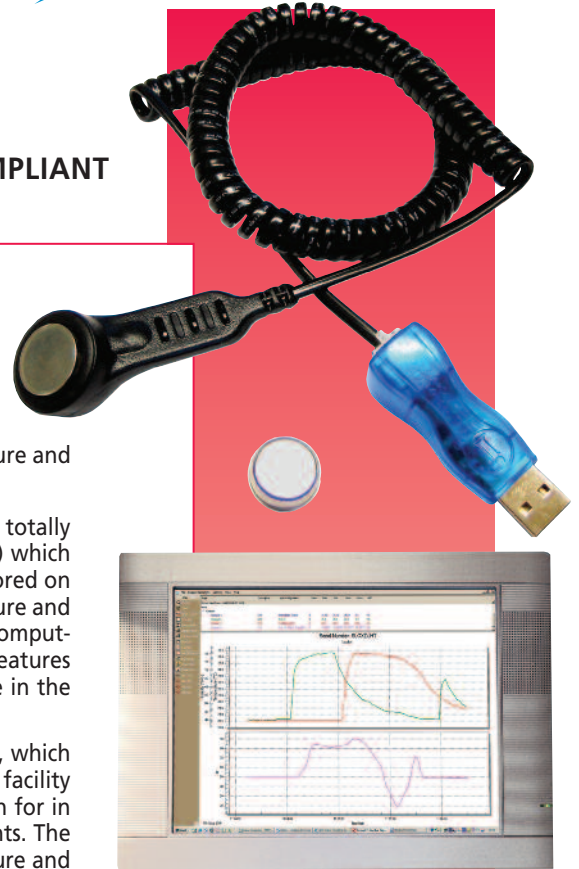
INTRODUCTION

The Signatrol model **SL54TH** is a two channel self-contained temperature and relative humidity data logger with the ability to record over 8,000 data points. It operates in a temperature range of -40°F to +257°F and relative humidity range of 0 to 100% RH.

They are very small (about the same size as a large watch battery) which enables them to be inserted into small items and packages. They are often used to monitor temperature and humidity of products during shipping.

The Signatrol model **SL50R** Button Reader™ interfaces to the USB port of a PC and is totally compatible with our **TempIT** data analysis software (free download from our web site) which provides all the features necessary to configure, as well as graphically view the data stored on Signatrol data loggers. A historical graph is produced which shows the stored temperature and humidity profiles with full X-Y zoom. By plugging a Dongle into the USB port of your computer the software can be up-graded to **TempIT-Pro 4** which provides various additional features such as data table, export to spreadsheet function and the facility to e-mail anywhere in the world.

With **TempIT-Pro 4** data can be easily exported in comma-delimited value format (CSV), which can be imported into spreadsheet programs like Excel or Lotus 1-2-3. A built-in e-mail facility enables graphs to be sent to remote locations. E-mailing the graph is a useful function for incoming goods inspectors who need to have quality approval before accepting shipments. The **TempIT** software also automatically calculates dew point from the measured temperature and relative humidity readings.



SPECIFICATIONS @ 68°F

Power	Internal Battery
Battery Life	Dependant on Sample Rate and ambient temperatures. (typically 5 years at 10 minute sample rate.)
Temperature Range	-40°F to 185°F – Storage -4°F to 185°F – Operating
Temperature Accuracy	±0.9°F from 14°F to 158°F
Relative Humidity Accuracy	±5% RH
Temperature Resolution	Low Resolution Mode: 0.9°F High Resolution Mode: 0.126°F
Relative Humidity Resolution	Low Resolution Mode: 0.64% RH High Resolution Mode: 0.04% RH
Number of Readings	8192 low resolution mode (4096 Temperature & 4096 Humidity) 4096 high resolution mode (2048 Temperature & 2048 Humidity)
Delayed Start	Yes, up to 1 year – 1 minute resolution
Sample Rate	1 second to 24 hours
Software Alarms	Yes
Intrinsic Safety	Meets UL#913 (4th Edit); Intrinsically Safe Apparatus, approval under Entity Concept for use in Class I, Division 1, Group A, B, C, and D Locations (application pending)
Material	305 Stainless Steel
Warranty	1 Year
Dimensions	0.67" Diameter x 0.24" High

ACCESSORIES



DONGLE
To Upgrade Software

SL50-ACC02
Magnet & Hole Mounting

SL50-CLIP
Attachable FOB

SL50-WALL
Wall Mount

ORDER CODES:

- SL54TH** RH and Temperature Data Logger
SL54TH-KIT-X-D X = Number of Button Loggers in Kit (Consisting of: Dataloggers, TempIT-Pro 4 Software & Dongle, SL50R USB Interface and SL50-CLIP Mounting.)

Local Representation