

RTD DIN RAIL TRANSMITTER

SEM1605P

- COST EFFECTIVE RTD TRANSMITTER
- Pt100, Cu100, Cu53, Ni100, Ni120
- 4 to 20mA LOOP POWERED OUTPUT
- CALIBRATE AGAINST LIVE INPUT VALUE
- USER TRIM OUTPUT
- SIMPLE CONFIGURATION VIA USB PORT



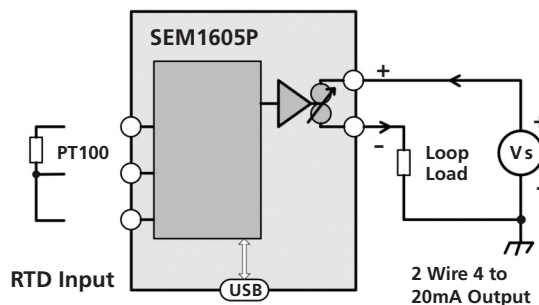
INTRODUCTION

The SEM1605P is the next generation DIN rail mounted temperature transmitter from Status Instruments. It has been designed to accept most common RTD temperature sensor inputs and provide the user with a standard two-wire 4 to 20mA output signal. All temperature ranges are linear to temperature.

Designed for ease of use, our latest USB interface is fitted for quick and easy configuration. Just connect a standard USB cable between the SEM1605P and your computer and your PC. Our FREE configuration software, will guide you through any changes you wish to make. To further help save time, the SEM1605P does not need to be wired to a power supply during the configuration process, it is powered via the USB interface from your PC. The following parameters are configurable:

INPUT TYPE	LOW RANGE	HIGH RANGE	UNITS	BURNOUT	PUSH BUTTON
Pt100 0.003851 IEC 0.00391 IPTS 0.00392 IPTS 0.00393 ITS	Input @ 4mA	Input @ 20mA	°F, °C	Up/Scale Down/Scale	Adjust or Range or Off
Ni100					
Ni120					
Cu53					
Cu100					

The SEM1605P is also provided with user push button ranging, allowing adjustments at both 4mA and 20mA for a live value. The user adjust function can be locked during configuration if not required. The state LED indicates out of range input during normal operation, during user adjust it is also used to indicate the stage of adjustment. The buttons can also be used for 4mA and 20mA current trim adjustment to add small offsets to 4mA to 20mA current trim adjustment to add small offsets to 4mA or 20mA output.



SPECIFICATIONS @ 68°F

INPUT TYPE	RANGE (°F)	RANGE (°C)	ACCURACY/STABILITY
Excitation 660µA Lead resistance 0 to 20Ω 2 or 3 Wire Connection			
Sensors			0.2 °C + (0.05% of reading) (Plus sensor)
Pt100 (IEC)	-328 to 1,562	-200 to 850	
Pt100 0.00391 (IPTS)	-328 to 1,166	-200 to 630	
Pt100 0.00392 (IPTS)	-328 to 1,166	-200 to 630	
Pt100 0.00393 (ITS)	-328 to 1,166	-200 to 630	
Ni100	-112 to 500	-80 to 260	
Ni120	-112 to 500	-80 to 260	
Cu53	-58 to 356	-50 to 180	
Cu100	-112 to 500	-80 to 260	
Thermal Stability			± 0.02 °C / °C

OUTPUT TWO WIRE 4 to 20mA LOOP	
Range	4 to 20mA
Range Extremes	3.8 to 21.5mA
Accuracy	(mA output / 2000) or 5µA (Whichever is greater)
Supply Voltage	10 to 30VDC
Loop Effect	± 0.2µA / V
Thermal Stability	± 2µA / °C
Max Load	[(Vsupply-10)/20] K ohms (Example 700 Ohms @ 24V)

USB USER INTERFACE	
Type\options\function	Description
USB 2.0	Mico B
Baud Rate	19.2 Kbaud
Sensor Configuration	Select Sensor Type = RTD Trim Sensor Offset = ±10°C (± 18°F) Preset sensor value (Diagnostics)
Loop	Set Range Active Range Set Burnout Preset output loop current (Diagnostics)
Live Data	Read Sensor Temperature Percentage output Read Loop Current

LED STATE	
Type	Red LED
ActionAccuracy	If mA output < -0.1% or > 100.1% LED ON

AMBIENT	
Ambient	-22 to 158°F

BUTTONS OUTPUT ADJUST / ACTIVE RANGE	
Off	Locked
Adjust Output	Adjust 4mA when in range 3.8 to 6.0mA, 20mA when in range 18 to 21.5mA
Active Range	Range 4mA and 20mA points against live input

MECHANICAL	
Connection	Screw Terminals
Enclosure	DIN RAIL Mounted 6 terminals
Weight	Approximately

APPROVALS	
EMC	EN BS 61326 Industrial Emissions

GENERAL	
Update Response Times	0.5 Second Update 1 Second Response
Warm Up Time	1 Minute
Start-Up Time	8 Seconds
Protection	Reverse Connection
Enclosure	Device must be installed in an enclosure offering > IP65 Protection

AMBIENT	
Ambient	-22 to 158°F
Storage	-40 to 185°F

MECHANICAL DETAILS

Material Polymide 6.6 self extinguishing

Terminals Screw terminal

Cable 2.5 mm Max

Color Gray

REFER TO INSTRUCTION MANUAL BEFORE USE

CE

WEEE symbol

Dimensions: 0.69" (width), 2.22" (depth), 3.54" (height)

ORDER CODES:

SEM1605P RTD DIN RAIL Transmitter

Local Representation



12H Worlds Fair Drive, Somerset, NJ 08873
 Phone: (800) 700-3272 Fax: (800) 700-5468 (US & CA only)
 Email: sales@statinst.com Web: www.statinst.com