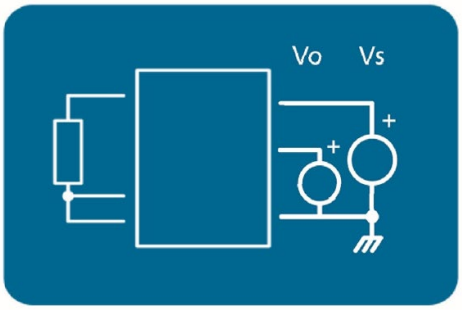
SEM1605PV DIN RAIL WITH RTD (Pt100) I/P AND VOLTAGE O/P

- **ACCEPTS PT100, Cu100, Cu53, Ni100, Ni120 SENSORS**
- **(0 to 10) mA THREE WIRE OUTPUT**
- **USER OUTPUT TRIM (ZERO and SPAN)**
- **PC CONFIGURATION USING USB PORT**
- **LIVE DATA CAN BE VIEWED ON AN ANDROID PHONE OR TABLET**





INTRODUCTION

The SEM1605PV is a DIN rail mounted Voltage Output temperature transmitter from Status Instruments. It has been designed to accept common RTD temperature sensor inputs and provide the user with a standard three wire (0 to 10) volt output signal. The output signal is 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 SEM1605PV and your PC. Our free configuration software will guide you through any changes you wish to make. To further help save time, the SEM1605PV does not need to be wired to a power supply during the configuration process, it is powered via the USB interface from your PC.

FEATURE HIGHLIGHTS

ACTIVE RANGE The SEM1605PV is provided with a user push-button ranging option, allowing adjustments at both 0 V and 10 V against a live input.
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.

(0 and 10) V TRIM The buttons can also be used for 0 V and 10 V trim adjustment to add small offsets to (0 or 10) V output.

SENSOR REFERENCING The SEM1605PV sensor referencing, via the Windows based USB-Speedlink software, allows for close matching to a known reference sensor, eliminating possible sensor errors.

SENSOR BURN OUT DETECTION If a sensor wire is broken or becomes disconnected, the SEM1605PV output will automatically go to its user-defined level (upscale or downscale) or a pre-set value.

STABILITY The SEM1605PV DIN rail transmitter incorporates digital technology to ensure accurate low-drift performance.

USB PC CONFIGURATION The SEM1605PV is quick and easy to configure using a standard-type USB lead and the free-of-charge USBSpeedLink Windows software.

USB ANDROID VIEW The SEM1605PV can be connected to an android phone or tablet using an OTG USB adaptor. Running a free App, the Android device can then be used to view live data from the SEM1605PV.

SENSOR INPUT **SPECIFICATIONS @20°C** **RTD**		
Type	**Range**	**Accuracy/ Stability**
PT100 (IEC)	(-200 t0 850) °C	0.2°C + (°0.05% of reading) Plus sensor error
PT100 0.391	(-200 to 630) °C	
PT100 0.392	(-200 to 630) °C	
PT100 0.393	(-200 to 630) °C	
Cu53	(-40 to 180) °C	
Cu100	(-80 to 260) °C	
Ni100	(-70 to 180) °C	
Ni120	(-70 to 180) °C	
Excitation current		660 uA
Maximum lead resistance	2 or 3 wire	20 Ω
Thermal stability		± 0.02 °C / °C

OUTPUT		**SPECIFICATIONS @20°C**
Type/ Function	**Range/ Description**	**Accuracy/ Stability/ Notes**
Three wire voltage	(0 to 10) V	(V output /2000) or 3 mV (Whichever is the greater)
Thermal drift	Zero at 20°C	1 mV/°C Typical (2 mV /°C Max)
Maximum output voltage	10.5 V	In high-burnout condition
Minimum output voltage	< 0.0 V	In low-burnout condition
Minimum output load	5000 Ohms	2mA @ 10V
Supply	(15 to 30) V DC	SELV
Power		< 1 W full power

USB USER INTERFACE		
Type/ Function	**Range/ Description**	**Notes**
Configuration hardware		USB A to mini B lead
Configuration software	USBSpeedLink	Download www.status.co.uk
Sensor configuration	Sensor type	RTD list
	Temperature range for (0 to 10) V Output	°C or °F Active or manual range
	Sensor offset	±10 °C or ±18°F
	Burnout Voltage	Upscale, downscale or user-set
Pre-set temperature (diagnostics)	Any within sensor range	°C or °F
Pre-set output voltage (diagnostics)	Any within output range	V
Tag		20 characters
Button function		Trim, active range, off
Read live data	Temperature Output	°C or °F V
Save/ open configuration		To/ from PC file

ANDROID USER INTERFACE		
Type/ Function	**Range/ Description**	**Accuracy/ Stability/ Notes**
Hardware	USB Lead	OTG plus A to Mini B
Software	USBViewLink	Download from Google play store
Read live data	Input signal Output value	°C, °F V

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USER PUSH BUTTON INTERFACE		
Function	**Description**	
Active range	Range 0 Volt and 10 Volt points against live input	
User trim	Adjust at maximum and minimum input range value	Offset (0 V) and span (10 V) adjustment

GENERAL	
Function	**Description**
Response time	500 ms to 70% of final value
Start-up time	8 s
Warm-up time	120 s to full accuracy
Default configuration	PT100 (0 to 100) °C, upscale burnout
LED (red)	If Voltage output < -0.1% or > 100.1 % LED ON
Protection	Reverse connection

ENVIRONMENTAL	
Function	**Description**
Ambient temperature	Operating (-30 to 70) °C Storage (-40 to 85) °C
Ambient humidity	Operating/Storage (10 to 90) %RH non-condensing
Protection requirement	Device must be installed in an enclosure offering >IP65 Protection
USB configuration ambient	(10 to 30) °C

MECHANICAL	
Function	**Description**
Dimensions	12.5 mm width, 56.4 mm depth from rail, 90 mm height
Enclosure	DIN rail mount
Material	Polyamide 6.6 self-extinguishing UL94-HB: Grey
Connections	Screw terminals 2.5 mm wire maximum
Weight	60 g approximate

APPROVALS	
EMC	BS EN 61326: Note - Compliance tested with 30 m input wires
Ingress protection	BS EN 60529
RoHS Directives 2 & 3	2011/65/EU & EU 2015/863, and the UK designated standards

ORDER CODE	**SEM1605PV**

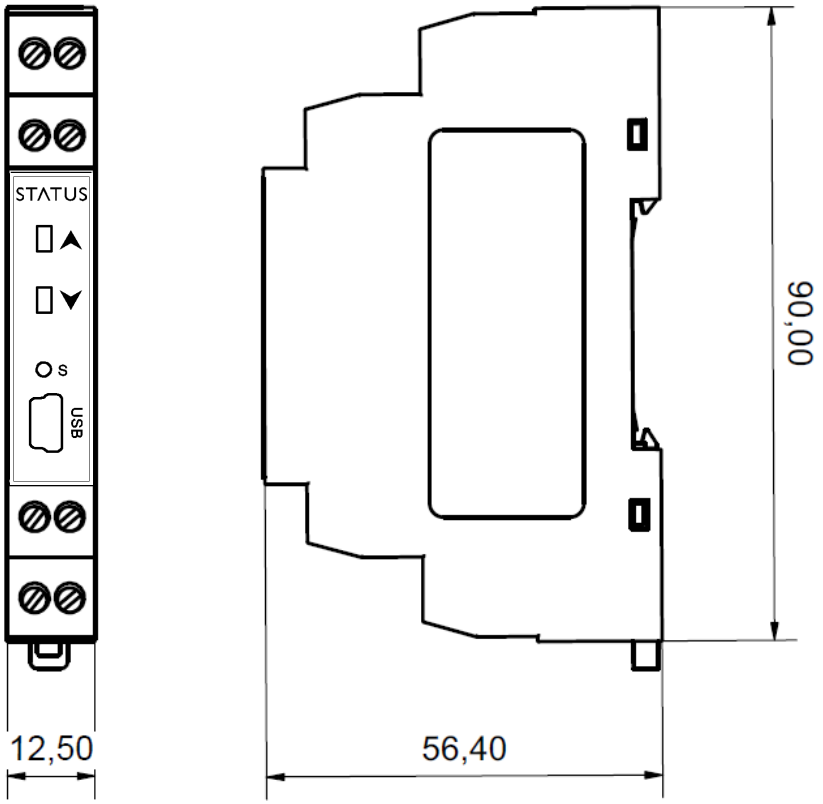
ACCESSORIES	
USB configuration software	USBSpeedLink free of charge from www.status.co.uk
Android live data view	USBView free of charge from www.status.co.uk
Probe options	Refer to www.status.co.uk
USB Leads	Contact sales@status.co.uk

To maintain full accuracy annual calibration is recommended. Contact support@status.co.uk for details.
The data in this document is subject to change. Status Instruments assumes no responsibility for errors.

SEM1605PV DIN RAIL WITH RTD (Pt100) I/P AND VOLTAGE O/P

Mechanical

Dimensions in mm



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