

# CAL MAXVU RAIL

## Temperature Controller / Transmitter Datasheet

**WEST**  
Control Solutions



## Overview

MAXVU Rail temperature and process controller is a behind panel DIN-rail mounted device that's easy to install and fast to setup with an easy to read OLED display.

MAXVU Rail provides an affordable solution where essential temperature controller is required, it offers a universal input and up to 3 outputs.

The unit also has a transmitter mode disabling control for temperature and process measurement applications.

## At a Glance

- DIN rail mounted
- PID or ON/OFF control
- Universal input
- Up to 3 outputs
- Digital Input
- RS485 communications option
- Transmitter mode
- Fast configuration
- Clear OLED display
- 22.5mm module width

## Specification

### Input

<b>Thermocouple</b>	J, K, C, R, S, T, B, L, N.
<b>RTD</b>	3 Wire PT100
<b>DC Linear</b>	0 to 20mA, 4 to 20mA, 0 to 50mV, 10 to 50mV, 0 to 5V, 1 to 5V, 0 to 10V, 2 to 10V. Scalable -1999 to 9999, with adjustable dec point
<b>Accuracy</b>	Thermocouple $\pm 0.25\%$ of full range $\pm 1$ LSD ( $\pm 1^\circ\text{C}$ for thermocouple CJC). PT100 $\pm 0.25\%$ of full range, $\pm 1$ LSD, Linear $\pm 0.25\%$ of full range, $\pm 1$ LSD.
<b>Sampling</b>	4 per second
<b>Impedance</b>	>10M $\Omega$ resistive, except DC mA (5 $\Omega$ ) and V (47K $\Omega$ )
<b>Sensor Break Detection</b>	<2 seconds (except zero based DC ranges), high alarms activate for T/C, RTD and mV ranges, low alarms activate for mA or V ranges
<b>Digital Input</b>	Reset Alarm, Control enable/disable, Auto/Manual control, Tune start/stop. Volt Free or TTL compatible, 24VDC

### Outputs & Options

<b>Relay</b>	OUT1 SPDT Form C, OUT2 / 3 SPST Form A relay; current capacity 2A at 250V. >150,000 operations at rated voltage/current, resistive load
<b>SSR</b>	Drive capability >10V DC @ 20mA
<b>Linear DC</b>	0 to 20mA, 4 to 20mA, 0 to 5V, 0 to 10V or 2 to 10V Current output 500 $\Omega$ max, Voltage output 500 $\Omega$ min
<b>Serial Communications</b>	2 Wire RS485, 1,200 to 38,400 baud, Modbus RTU

## Key Features

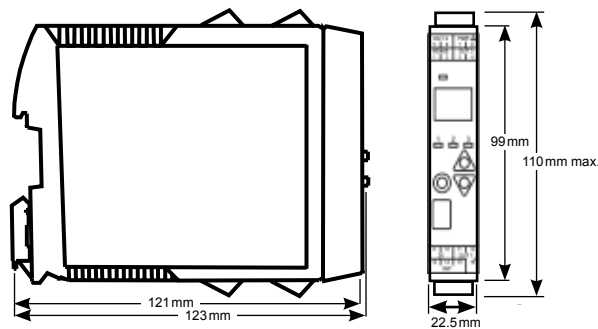
- Text / Icon matrix display
- Quick setup menu with main configuration parameters
- Thermocouple, PT100 or linear DC sensor input
- Up to 3 outputs; relay, SSR or Linear DC
- Isolated Digital input
- High/low, deviation or band alarms
- 3 button operation
- 3 status LEDs
- Front panel configuration or via PC configuration software
- RS485 Modbus RTU communications

## Specification

### Operating and Environmental

<b>Temperature &amp; RH</b>	• 0 to 55°C (-20 to 80°C storage), 20% to 95% RH non-condensing
<b>Altitude</b>	• <2000m
<b>Power Supply</b>	• 100 to 240V ±10%, 50/60Hz, 9VA(mains powered version) • 24V DC/AC +10%/-15%, AC 50/60Hz, 5W (low voltage version)
<b>Enclosure Protection</b>	• IP20
<b>Standards</b>	• CE, UL & cUL
<b>EMI</b>	• Complies with EN61326-1 (Susceptibility & Emissions)
<b>Safety</b>	• Complies with EN61010-1 & UL61010-1
<b>Considerations</b>	• Pollution Degree 2, Installation Category II
<b>Weight</b>	• 0.20kg excluding packaging
<b>Communications</b>	• RS485 Modbus RTU communication option

### Dimensions



### Ordering Code

**MVR - 1 x x - x x x x - 5 x U 0 xxxx**

#### Digital Input

Isolated 1

#### Variant

Standard 0

Extrusion E

#### Supply Voltage

110 to 240V AC M

24V AC / DC L

#### Manual / HMI Language

1 English

2 French

3 German

#### Output

**Out 1      Out 2      Out 3**

C/O Relay	SSR	None	Z	A	0
C/O Relay	Relay	None	Z	R	0
SSR	SSR	None	A	A	0
C/O Relay	SSR	Relay	Z	A	R
C/O Relay	Relay	Relay	Z	R	R
SSR	SSR	Relay	A	A	R
C/O Relay	SSR	Linear	Z	A	L
C/O Relay	Relay	Linear	Z	R	L
SSR	SSR	Linear	A	A	L

#### Option Slot 2

0 Not Fitted

C RS485 Communications

## Accessories

### MAXVU Configuration software

For PC setup MAXVU configuration software is available free of charge from [www.west-cs.com](http://www.west-cs.com).

A USB configuration cable is also available from your local WCS distributor.



MAXVU configuration software is simple to use for fast set up of MAXVU devices.



Set-up wizard simplifies the set-up further.

Provides step-by-step guidance to device configuration with detailed assistance on each setting.



Clear and logical side tabs make it easy to find parameter settings in tabular form.

Simple icon driven taskbar along top for all main functions



Each parameter shows current setting and can easily be changed by drop-down menus or entering values.

Allowable setting range is shown for guidance.

A useful help box provides additional assistance.