

CAL MAXVU RAIL

Temperature Limit Device Datasheet



Overview

MAXVU Rail temperature and process limit is a device that's easy to install and fast to setup with an easy to read OLED display.

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

At a Glance

- DIN rail mounted
- Universal input
- Up to 3 outputs
- Digital Input
- RS485 communications option
- Fast configuration
- Clear OLED display
- 22.5mm module width

Specification

Input

| | |
|------------------------|---|
| Thermocouple | • J, K, C, R, S, T, B, L, N. |
| RTD | • 3 Wire PT100 |
| DC Linear | • 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 |
| Accuracy | • Thermocouple $\pm 0.25\%$ of full range ± 1 LSD ($\pm 1^\circ\text{C}$ for thermocouple CJC). PT100 $\pm 0.25\%$ of full range, ± 1 LSD, Linear $\pm 0.25\%$ of full range, ± 1 LSD. |
| Sampling | • 4 per second |
| Impedance | • $>10\text{M}\Omega$ resistive, except DC mA (5Ω) and V ($47\text{K}\Omega$) |
| Sensor Break Detection | • <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 |
| Digital Input | • Reset Alarm. Volt Free or TTL compatible, 24VDC |

Outputs & Options

| | |
|-----------------------|---|
| Relay | • LIMIT SPDT Form C, AL1 / 2 SPST Form A relay; current capacity 2A at 250V. $>150,000$ operations at rated voltage/current, resistive load |
| SSR | • Drive capability $>10\text{V DC @ } 20\text{mA}$ |
| Linear DC | • 0 to 20mA, 4 to 20mA, 0 to 5V, 0 to 10V or 2 to 10V • Current Output 500Ω max, Voltage Output 500Ω min |
| Serial Communications | • 2 Wire RS485, 1,200 to 38,400 baud, Modbus RTU |

Key Features

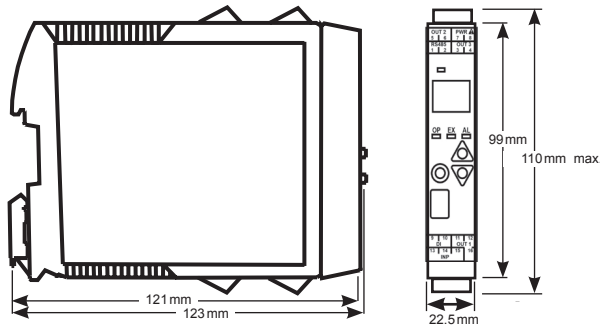
- Text / Icon matrix display
- Quick setup menu with main configuration parameters
- Thermocouple, PT100 or linear DC sensor input
- Up to 3 outputs; relay, SSR or Linear DC
- Isolated Digital input
- Limit alarm plus warning, high/low or deviation
- 3 button operation
- 3 status LEDs
- Front panel configuration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

Specification

Operating and Environmental

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

Dimensions



Ordering Code

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

Digital Input

Isolated

1

Supply Voltage

110 to 240V AC

24V AC / DC

M

L

Manual / HMI Language

1 English

2 French

3 German

Output

LIMIT

C/O Relay

C/O Relay

C/O Relay

C/O Relay

C/O Relay

C/O Relay

AL1

Relay

Relay

SSR

Relay

SSR

SSR

AL2 / PV

None

Relay

Linear

Linear

None

Relay

Z R 0

Z R R

Z A L

Z R L

Z A 0

Z A R

Option Slot 2

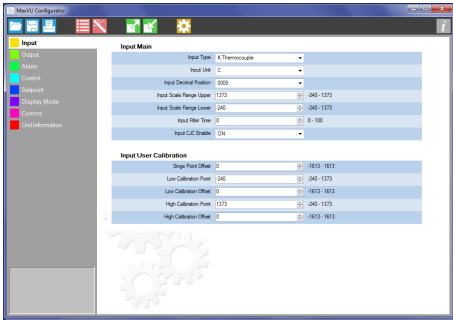
0 Not Fitted

C RS485 Communications

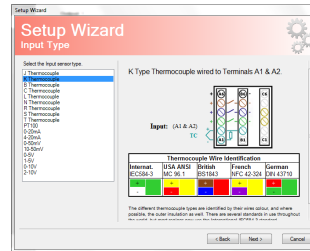
MAXVU Configuration software

For PC setup MAXVU configuration software is available free of charge from www.west-cs.co.uk.

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

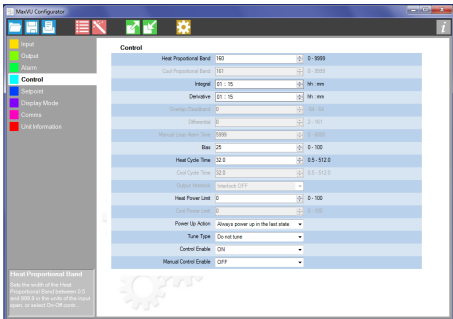


MAXVU configuration software is simple to use for fast set up of MAXVU devices.



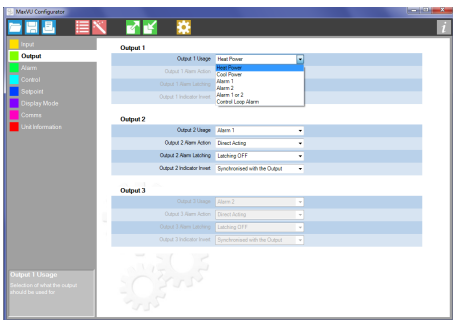
Set-up wizard simplifies the set-up further.

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.