

CAL MAXVU Datasheet

Temperature and Process Controller



Overview

MAXVU has been designed to offer essential temperature control in a device that's easy to install, fast to program, with improved display visibility.

MAXVU provides an affordable solution for applications where primary temperature control functions such as heat only or heat/cool are needed. It offers a universal input and up to 3 outputs with a choice of either relay or SSR Drive.

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 decimal 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, DC Linear $\pm 0.2\%$ 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

Outputs & Options

Relay	• SPST Form A relay; current capacity 2A at 250VA. • $>150,000$ operations at rated voltage/current, resistive load
SSR	• Drive capability $>10\text{V DC @ } 20\text{mA}$
Serial Communications	• 2 Wire RS485, 1,200 to 38,400 bps, Modbus RTU

Operating and Environmental

Temperature & RH	• 0 to 55°C (-20 to 80°C storage), 20% to 95% RH non-condensing
Power Supply	• 100 to 240V 50/60Hz (mains powered version) • 24V DC/AC $+10\%/ -15\%$, AC 50/60Hz (low voltage version)
Front Panel Protection	• IP65 (Behind panel IP20)

WEST
Control Solutions

At a Glance

- 1/8 DIN (96 x 48mm) and 1/16 DIN (48 x 48mm)
- Universal input
- Up to 3 outputs
- RS485 communications option
- Fast configuration
- Large clear display
- Depth 67mm

Key Features

- High visibility 18mm display digits (10.2mm lower display 1/16 DIN)
- Quick setup menu with top 10 configuration parameters
- Thermocouple, PT100 or linear DC sensor input
- Up to 3 outputs, relay or SSR
- 2 process alarms, high/low, deviation or band.
- 3 button operation
- 2 x 4 digit display and 3 output status LEDs
- Front panel configuration or via PC configuration software
- RS485 Modbus RTU communications

Specification

Standards	• CE
EMI	• Complies with EN61326 (Susceptibility & Emissions)
Safety Considerations	• Complies with EN61010-1 & UL61010-1
	• Pollution Degree 2, Installation Category II
Dimensions (Front Fascia)	• 1/16 DIN = 48 x 48mm
	• 1/8 DIN = 96 x 48mm
Weight	• 1/8 DIN, 0.12kg excluding packaging
	• 1/16 DIN x 0.08kg excluding packaging
Communications	• RS485 Modbus RTU communication option

Ordering Code and MAXVU Configuration Software

Supply Voltage

M 110 to 240V AC
L 24V AC / DC

Communications

0 Not Fitted
C RS485 Communications

MV

16

0

M

AA0

0

2

1

U0

Format

16 1/16 DIN, 48 x 48mm
08 1/8 DIN, 96 x 48mm

Output

	Out 1	Out 2	Out 3
AA0	SSR	SSR	None
AR0	SSR	Relay	None
RR0	Relay	Relay	None
ARR	SSR	SSR	Relay
RRR	Relay	Relay	Relay

MAXVU Configuration software

Controllers can be programmed quickly using the dedicated PC configuration tool via MAXVU's integral configuration port.

- Logical menu driven interface
- Tables with dropdown menus
- Graphical setup wizard with informative help panel
- Save configuration files
- Print report of controller settings

