

UNIMOD range is a low cost alternative for the expensive IO modules for PLCs and DCS. Different combinations are available in this series to suit different applications. With the help of powerful communication feature built in the unit, the input & outputs in this module can be accessed and controlled from a PLC/DCS/SCADA.



One 8x1 alphanumeric LCD with backlight is provided on the front for displaying the Process Values and the channel numbers. Four numbers touch keys are provided for configuring various settings. Following are the different modules available in the UNIMOD series.

UNIMOD

This is an Universal Analog Input module. It has provision for accepting 8 analog inputs. Each channel input can be from different thermocouples / RTD / Transmitter signals (0 – 20mA or 4 – 20 mA.) Each channel input can be programmed through the keypad. Cold junction compensation is provided through built in IC sensor. The channels can be digitally calibrated online with the help of a standard source.

PWR08

This has provision for 8 analog inputs (either thermocouple or 0-20mA / 4-20mA), 8 Opto isolated digital inputs and 8 Opto isolated open collector drivers. The analog input type is predefined for either thermocouple or mA input. The analog input values and the status of digital inputs can be accessed through communication port and the 8 Open collector drivers can be driven through the communication port.

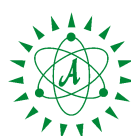
MWC08

This has provision for 8 analog inputs (either thermocouple or 0-20/4-20mA) and 2 retransmission analog outputs. The two analog outputs can be predefined for any of the selected channel or maximum or average of 8 channel inputs or any other function defined by the user. The analog channel values can be accessed through communication port.

RTDIO

This has provision for a maximum of 16 RTD inputs and a maximum of 3 retransmission analog outputs. The analog outputs can be field programmed for different functions such as the maximum / average / minimum of a group of channels.

Technical Spec.	UNIMOD	PWR08	MWC08	RTDIO
Type	Microcontroller based	Microcontroller based	Microcontroller based	Microcontroller based
No. of Inputs	8	8	8	Maximum 16
Analog Input Type	Individual input Field selectable from T/C(R,S,J,K,T,E) RTD (PT100, CU53) 0 – 20 / 4 – 20 mA	All 8 inputs are predefined for T/C or 0 -20 / 4 – 20 mA.	All 8 inputs are predefined for T/C or 0 -20 / 4 – 20 mA.	3 wire RTD (PT100 / CU53)
Measuring Range	R 0°C to 1760°C S 0°C to 1760°C J -50°C to 760°C K -50°C to 1350°C T -50°C to 400°C E -50°C to 1000°C PT 100 -200°C to 850°C CU53 -50°C to 200°C 4 - 20mA Eng. Units programmable	R 0°C to 1760°C S 0°C to 1760°C J -50°C to 760°C K -50°C to 1350°C T -50°C to 400°C E -50°C to 1000°C 4 - 20mA Eng. Units programmable	R 0°C to 1760°C S 0°C to 1760°C J -50°C to 760°C K -50°C to 1350°C T -50°C to 400°C E -50°C to 1000°C 4 - 20mA Eng. Units programmable	PT100 - 200°C to 850°C CU53 - 50°C to 150°C
Analog Input accuracy	± 0.1%FS, ±1 Dgt for mA ±0.2% FS, ±1 Dgt for TC&RTD	± 0.1%FS, ±1 Dgt for mA ±0.2% FS, ±1 Dgt for TC	± 0.1%FS, ±1 Dgt for mA ±0.2% FS, ±1 Dgt for TC	± 0.2% FS, ± 1 Dgt
Cold Junction Compensation	Built-in IC type sensor	Built-in IC type sensor if input type is T/C	Built-in IC type sensor if input type is T/C	Not applicable
Analog Output	Not available	Not available	Maximum 2.	Maximum 3.
Analog Output function	—	—	Channels can be grouped into 2 and the 2 analog outputs can be field programmed for the maximum / average / minimum of the selected group. Or can be field programmed for 2 channels.	Channels can be grouped into 3 and the 3 analog outputs can be field programmed for the maximum / average / minimum of the selected group. Or can be field programmed for 3 channels.
Analog Output accuracy	—	—	±0.2% FS	±0.2% FS
Digital Input	Not available	Not available	8 Opto Isolated inputs	Not available
Open Collector Output	Not available	Not available	8 Opto Isolated outputs each with a drive capacity of 100mA.	Not available
Termination of Field inputs and outputs	Through TBs suitable for 1.5 sq.mm cable	Through TBs suitable for 1.5 sq.mm cable	Through TBs suitable for 1.5 sq.mm cable	Through TBs suitable for 1.5 sq.mm cable
Calibration of analog inputs & Outputs	Easy online digital calibration	Easy online digital calibration	Easy online digital calibration	Easy online digital calibration
Display & Keypad	8 x 1 LCD with backlit 4 keys	8 x 1 LCD with backlit 4 keys	8 x 1 LCD with backlit 4 keys	8 x 1 LCD with backlit 4 keys
Communication Port	RS485 / RS232C	RS485 / RS232C	RS485 / RS232C	RS485 / RS232C
Communication protocol & settings	Industry standard MODBUS slave. Station No, Baud, Parity field programmable	Industry standard MODBUS slave. Station No, Baud, Parity field programmable	Industry standard MODBUS slave. Station No, Baud, Parity field programmable	Industry standard MODBUS slave. Station No, Baud, Parity field programmable
Parameter Settings Parameter protection Parameter storage	Through keypad Password protection EEPROM	Through keypad Password protection EEPROM	Through keypad Password protection EEPROM	Through keypad Password protection EEPROM
Power Supply	SMPS – 90-270V AC/DC Optional – 24V DC	SMPS – 90-270V AC/DC Optional – 24V DC	SMPS – 90-270V AC/DC Optional – 24V DC	SMPS–90-270V AC/DC Optional – 24V DC
Enclosure	MS Powder coated	MS Powder coated	MS Powder coated	MS Powder coated
Dimension	270(H) x 150(W)	270(H) x 150(W)	270(H) x 150(W)	270(H) x 150(W)
Mounting	Inside Panel	Inside Panel	Inside Panel	Inside Panel



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Information in this Catalogue is subject to change without notice

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