

<b>Analog Modules</b>					
<i>Modules</i>	<b>AI 622</b>	<b>AI 623</b>	<b>AI 621</b>	<b>AO 672</b>	<b>AO 673</b>
<i>Specifications</i>					
<b>Label</b>	AI622	AI623	AI621	AO672	AO673
<b>Number of channels</b>	8	8	8	8	8
<b>Current Input/ Output Range</b>	Input Range: 0/4-20mA	Input Range: 0/4-20mA HART Compatible	Input Range -Thermocouple: B, E, J, K, N, R, S, T	Output Range- Current: 0/4-20mA	Output Range- Current: 0/4-20mA HART Compatible
			Input Range - RTD: PT100, PT200, PT500, PT1000	Maximum Output current: 21.8 mA	Maximum Output current: 21.8 mA
<b>Diagnostics</b>	Wire Break, Input Short Circuit, Overflow, Underflow, Missing Field Power, Missing Analog Power, Internal Hardware Error, Board Temperature	Wire Break, Input Short Circuit, Overflow, Underflow, Missing Field Power, Missing Analog Power, Internal Hardware Error, Board Temperature	Wire Break, Input Short Circuit, Overflow, Underflow, Missing Field Power, Missing Analog Power, Internal Hardware Error, Board Temperature	Missing Analog Power, Missing Field Power, Wire Break, Internal Hardware Error, Board Temperature	Missing Analog Power, Missing Field Power, Wire Break, Internal Hardware Error, Board Temperature
<b>Resolution</b>	16 bits	16 bits	16 bits	14 bits	14 bits
<b>Accuracy</b>	±0.1%	±0.1%	± 1°C	±0.1%	±0.1%
<b>Accuracy over temperature range</b>	0.15% max	0.15% max	0.15% max	0.25% maximum	0.25% maximum
<b>Nonlinearity</b>	0.002%	0.002%	0.00%	-1/+2 LSB max	-1/+2 LSB max
<b>Calibration</b>	Internal	Internal	Internal	-----	-----
<b>Sample Rate</b>	20sps (per channel)	20sps (per channel)	About 10sps (per channel)		
<b>Noise suppression for noise frequency</b>	50/60 Hz	50/60 Hz	50/60 Hz	-----	-----

Isolation between bus and analog section	At least 1000V DC	At least 1000V DC	At least 1000V DC	-----	-----
Maximum permissible input voltage range	+12V DC to -5V DC	+12V DC to -5V DC	-----	-----	-----
Power consumption (from backplane bus)	Max: 2W	Max: 2W	Max : 2W	Maximum : 2W	Maximum : 2W
	Typical : 1.4W	Typical : 1.4W	Typical : 1.4W	Typical : 1.4W	Typical : 1.4W
Operating temperature	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Storage temperature	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Relative humidity	5% to 95%	5% to 95%	5% to 95%	5% to 95%	5% to 95%
Reference Standard	IEC 61131-2	IEC 61131-2	IEC 61131-2	IEC 61131-2	IEC 61131-2
Rated supply voltage	24V DC	24V DC	-----	24V DC	24V DC
Permitted supply voltage range	18V DC to 30V DC	18V DC to 30V DC	-----	18V DC to 30V DC	18V DC to 30V DC
Connection types	2-wire (loop powered), 4-wire	2-wire (loop powered), 4-wire	2-wire, 3-wire, 4-wire	-----	-----
Input impedance	-----	-----	> 20MΩ	-----	-----
Thermocouple Cold Junction Compensation	-----	-----	Internal/External	-----	-----
Settling time	-----	-----	-----	5ms	5ms
Current output Maximum open circuit voltage	-----	-----	-----	±14V	±14V
Minimum load impedance for voltage outputs	-----	-----	-----	500Ω	500Ω
Maximum load impedance for current outputs	-----	-----	-----	600Ω	600Ω
Maximum load impedance for capacitive loads	-----	-----	-----	1μF	1μF
Maximum load impedance for inductive loads	-----	-----	-----	10mH	10mH