DeviceNet Digital Remote I/O, Standard Terminal Block Type

Model	Basic unit	**ARD-DI08A**	**ARD-DI16N**	**ARD-DI16P**	**ARD-DO08R**	**ARD-DO08S**	**ARD-DO16N**	**ARD-DO16P**	**ARD-DX16N**	**ARD-DX16P**
	Expansion unit	**ARD-DI08AE**	**ARD-DI16NE**	**ARD-DI16PE**	**ARD-DO08RE**	**ARD-DO08SE**	**ARD-DO16NE**	**ARD-DO16PE**	**ARD-DX16NE**	**ARD-DX16PE**
Appearances & Dimensions		CE  [W105×H52×L38.5mm] DeviceNet CONFORMANCE TESTED								
Power supply		24VDC (allowable voltage range: 12-28VDC)								
Power consumption		Max. 3W								
I/O points		AC input 8 points	NPN input 16 points	PNP input 16 points	Relay output 8 points	SSR output 8 points	NPN output 16 points	PNP output 16 points	NPN input 8 + output 8 points	PNP input 8 + output 8 points
Control I/O	Voltage	75-250VAC	10-28VDC		Normally open (N.O.) 250VAC 2A 1a	30-250VDC	10-28VDC (voltage drop : Max. 0.5V)			
	Current	13mA / Point	10mA /Point			1A / Point	0.5A / Point (leakage current: Max. 0.5mA)		Input : 10mA, Output : 0.5A / Point (leakage current: Max. 0.5mA)	
	COMMON method	8 points, Common			1point, 1COM	8 points, Common				
Protection circuit		Surge, Reverse polarity protection circuit (common) Transistor output type - Overcurrent protection circuit (NPN type: operated from 1.9A → power is reapplied in overcurrent status, PNP type : Operated at min. 0.7A), Overheating protection (min. 165℃), Short-circuit protection								
Indicator		Network status LED (green, red), Module status LED (green, red), I/O status LED								
Material		Front case : PC, Body case : PC, Rubber cap : NBR								
Mounting		DIN rail or screw lock type								
Isolation type		I/O and inner circuit: insulated, DeviceNet and inner circuit: non-insulated, Power and DeviceNet: non-insulated								
Reference		**S-5 to 12**								

DeviceNet Digital Remote I/O, Sensor Connector Type

Model	Basic unit	**ARD-DI08N-4S**	**ARD-DI08P-4S**	**ARD-DO08N-4S**	**ARD-DO08P-4S**
	Expansion unit	**ARX-DI08N-4S**	**ARX-DI08P-4S**	**ARX-DO08N-4S**	**ARX-DO08P-4S**
Appearances & Dimensions		CE  [W31×H81.8×L58mm] DeviceNet CONFORMANCE TESTED			
Power supply		24VDC (allowable voltage range: 12-28VDC)			
Power consumption		Max. 3W			
Isolation type		Photocoupler isolated			
I/O points		NPN input 8 points	PNP input 8 points	NPN output 8 points	PNP output 8 points
Control I/O	Voltage	10-28VDC		10-28VDC (voltage drop : max. 0.5V)	
	Current	10mA/point (sensor current: 150mA/point)		Output: 0.3A/point (leakage current: max. 0.5mA)	
	COMMON method	8 points Common			
Protection circuit		Surge, Short-circuit, Overheating and ESD protection, Reverse polarity protection circuit			
		Overcurrent protection circuit (operated at min. 0.17A)		Overcurrent protection circuit (operated at min. 0.7A)	
Indicator		Network status (NS) LED (green, red), Unit status (MS) LED (green, red) I/O status LED (input: green, output: red)			
Material		Front Case: PC, Body Case: PC			
Mounting		DIN rail or Screw lock type			
Isolation type		I/O and inner circuit: insulated, DeviceNet and inner circuit: non-insulated, Power and DeviceNet: non-insulated			
Reference		**S-5 to 12**			

DeviceNet Analog Remote I/O, Standard Terminal Block Type

Model		ARD-AI04	ARD-AO04
Appearances & Dimensions		CE  [W105×H52×L38.5mm] DeviceNet CONFORMANCE TESTED (only for ARD-AI04, other models are compatible)	
Power supply		24VDC (allowable voltage range: 12-28VDC)	
Power consumption		Max. 3W	
I/O points		Input 4 points (switchable voltage/current)	Output 4 points (voltage 2CH, current 2CH)
Control I/O	Voltage	0-10VDC, -10-10VDC, 0-5VDC, 1-5VDC, -5-5VDC (input impedance: min. 1MΩ)	0-10VDC, -10-10VDC, 0-5VDC, 1-5VDC, -5-5VDC (load resistance: min. 1kΩ)
	Current	DC4-20mA, DC0-20mA (input impedance: 250Ω)	DC4-20mA, DC0-20mA (load resistance: max. 600Ω)
	Max. allowable range	±5% for rated input range	±5% for rated output range
	Resolution	14bit, 1/16,000	
	Accuracy	● At room temperature (25±5℃) range: ±0.3% F.S. ● Out of room temperature range: ±0.6% F.S.	
Protection circuit		Surge, Static electricity, Reverse polarity protection circuit	
Indicator		Network status (NS) LED (green, red), Unit status (MS) LED (green, red)	
Material		Front Case: PC, Body Case: PC	
Mounting		DIN rail or Screw lock type	
Isolation type		I/O and inner circuit: non-insulated, DeviceNet and inner circuit: insulated, Power and DeviceNet: insulated	
Reference		**S-13 to 24**	

Modbus Digital Remote I/O, Sensor Connector Type

Model	Basic unit	ARM-DI08N-4S	ARM-DI08P-4S	ARM-DO08N-4S	ARM-DO08P-4S
	Expansion unit	ARX-DI08N-4S	ARX-DI08P-4S	ARX-DO08N-4S	ARX-DO08P-4S
Appearances & Dimensions		CE  [W31×H81.8×L58mm]			
Power supply		Rated voltage: 24VDC (allowable voltage range: 12-28VDC)			
Power consumption		Max. 3W			
I/O points		NPN input 8 points	PNP input 8 points	NPN output 8 points	PNP output 8 points
Control I/O	Voltage	10-28VDC		10-28VDC (voltage drop : Max. 0.5V)	
	Current	10mA/points (sensor current: 150mA/points)		0.3A/point (leakage current: Max.0.5mA)	
	COMMON method	8 points Common			
Protection circuit		Surge, Short-circuit, Overheating and ESD protection, Reverse polarity protection circuit			
		Overcurrent protection circuit (operated at Min. 0.17A)		Overcurrent protection circuit (operated at Min. 0.7A)	
Indicator		Network status (NS) LED (green, red), Unit status (MS) LED (green, red), I/O status LED (input: green, output: red)			
Material		Front Case: PC, Body Case: PC			
Mounting		DIN rail or Screw lock type			
Isolation type		I/O and inner circuit: insulated, Modbus and inner circuit: non-insulated, unit power: non-insulated			
Reference		**S-25 to 29**			

Communication Converter (RS232C to RS485 converter / USB to RS485 converter)

Series		SCM-US48I	SCM-38I
Appearances & Dimensions		 [W39×H23.5×L75.5mm]	 [W39×H23.5×L75.5mm]
Power supply		5VDC USB bus power※1	12-24VDC
Power consumption		Max. 1W	Max. 1.7W
Communication speed※2		1,200 to 115,200bps (recommended: 9,600bps)	
Communication type		Half duplex type	
Available communication distance		USB: Max. 1m± 30% RS485: Max. 1.2km	Max. 1.2km
Multi-drop		Max. 31 multi-drop	
Data type	Data bit	5-bit, 6-bit, 7-bit, 8-bit	
	Stop bit	1-bit, 2-bit	
	Parity bit	None, Even, Odd	
Connection type		USB: USB 2.0 B type (male)	RS232C: D-sub 9-pin
		RS485: 4-wire screw terminal (2-wire communication type)	
Accessory		USB 2.0 AB type connector (length: 1m)	—
Reference		**S-30 to 41**	

※1: USB bus power is supplied from PC or USB host controller.
※2: Protocol and communication speed are set by Hyper terminal. DAQMaster, ParaSet, Modbus Poll.
When communicating with Autonics products, set communication speed to 9,600bps.
※There might be some differences in the specification above depending on PC environment.

Communication Converter (USB to Serial converter)

Series	SCM-US
Appearances & Dimensions	 ※**Cable length 1.5m** [W52×H18×L8mm]
Power supply※1	5VDC USB bus power
Power consumption	Max. 1W
Communication speed※2	1,200 to 115,200bps (recommended: 9,600bps)
Communication type	Half duplex type
Available communication distance	1.5m (not extension)
Isolation type	Non-isolated
Connector type	USB: USB 2.0 A type (male)
	Earphone jack (4 pole stereo phone plug)※3
Reference	**S-30 to 40**

※1: USB bus power is supplied from PC or USB host controller.
※2: Protocol and communication speed are set by Hyper terminal. DAQMaster, ParaSet, Modbus Poll.
When communicating with Autonics products, set communication speed to 9,600bps.
※3: Some products requires the EXT-US (converter cable, sold separately).
※There might be some differences in the specification above depending on PC environment.