

AK-1100



■ Specifications

Model Name		AK-1100
System	Protocol	EtherCAT
	Bus interface	2 x RJ45
	Data transfer medium	Ethernet/EtherCAT cable(min. Cat.5),shielded
	Data transfer rates	100 Mbit/s
	Distance between stations	Max. 100m(100BASE-TX)
	Number of EtherCAT Terminals	Up to 65535
	Protocol	EtherCAT
Power	Delay	Approx 1us
	Voltage Input	DC24V -15%/+20%, Short-circuit protection and polarity inverse protection
Chassis	Rated current consumption	200mA
	Dimensions	(L)100mm x (W)24mm x (H)80mm
	Installation method	DIN rail that complies with IEC 60715 (width: 35mm, thickness: 1mm)
Environment	Net Weight	90g
	Work Temperature	-20°C ~ 60°C (-4°F~140°F)
	Storage Temperature	-40°C ~ 80°C (-40°F ~ 176°F)
	Relative Humidity	95% (Non-condensing)
	Operating Vibration	5~500Hz, 1.5Grms, Follow IEC60068-2-64
	Operating Shock	20G peak acceleration(11ms duration) , Follow IEC60068-2-27
	EMC	CE/FCC

■ Ordering Information

Part No.	Product	Description
A79.11001.00.0001	AK-1100	EtherCAT Coupler

Note: If some optional parts are offered with the system, additional system certificates may be required in certain regions/countries.
Please contact NODKA for certificate compliance.

AL-1xxx



■ Specifications

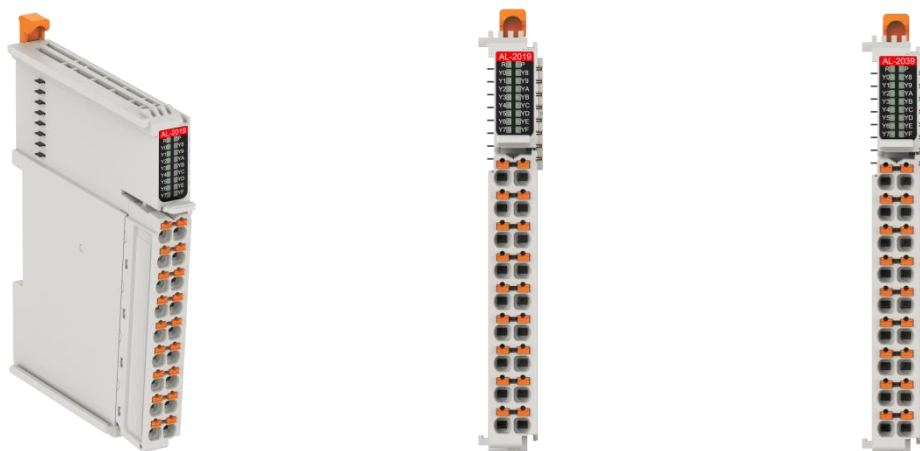
Model Name		AL-1219	AL-1229
DI	Specification	EN 61131-2(COM connects to 0V)	
	Number of Inputs	16	
	Signal Type	NPN/PNP	
	ON voltage	> 15 VDC	
	OFF voltage	< 5 VDC	
	Input filter	Typically 3ms	Typically 10us
	Electrical isolation	500VAC	
System	Field bus	EtherCAT	
	Voltage Input	5VDC	
	Rated current consumption	100mA	
Chassis	Dimensions	(L)100mm x (W)12mm x (H)80mm	
	Installation method	DIN rail that complies with IEC 60715 (width: 35mm, thickness: 1mm)	
	Weight	60g	
Environment	Operating temperature range	-20°C ~ 60°C (-4°F~140°F)	
	Storage temperature range	-40°C ~ 80°C (-40°F ~ 176°F)	
	Relative humidity	95%, no condensation	
	Operating Vibration	5~500Hz, 1.5Grms, Follow IEC60068-2-64	
	Operating Shock	20G peak acceleration(11ms duration) , Follow IEC60068-2-27	
	EMC	CE/FCC	

■ Ordering Information

Part No.	Product	Description
A79.12191.00.0001	AL-1219	16Channel digital input,NPN/PNP, filter:3ms, 24VDC
A79.12291.00.0001	AL-1229	16Channel digital input,NPN/PNP, filter:10us, 24VDC

Note: If some optional parts are offered with the system, additional system certificates may be required in certain regions/countries.
Please contact NODKA for certificate compliance.

AL-2xxx



■ Specifications

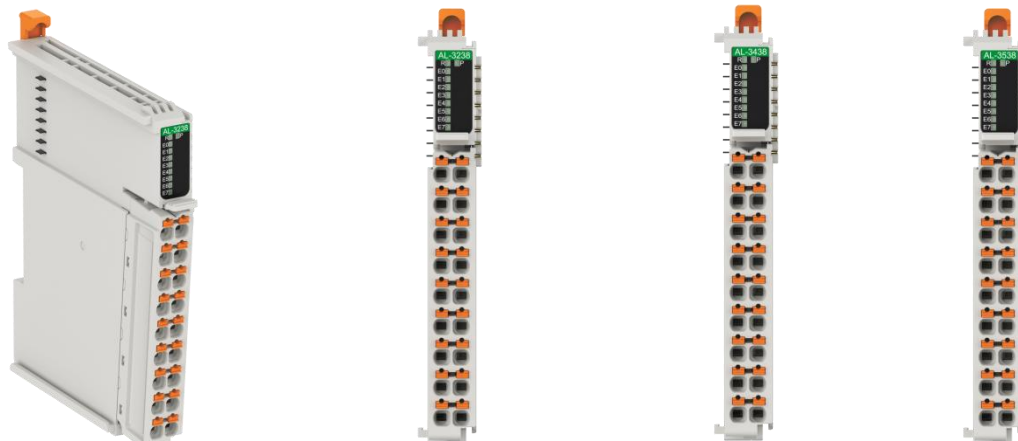
Model Name		AL-2019	AL-2319
DO	Number of Outputs	16	
	Signal Type	NPN	PNP
	Load type	resistance, inductive, lamp load	
	Max. output current	0.5A (short-circuit proof) per channel	
	Short-circuit current	< 1.5A	
	Electrical isolation	500VAC	
	Nominal voltage of the inputs	DC24V	
System	Field bus	EtherCAT	
	Voltage Input	5VDC	
	Rated current consumption	125mA	
Chassis	Dimensions	(L)100mm x (W)12mm x (H)80mm	
	Installation method	DIN rail that complies with IEC 60715 (width: 35mm, thickness: 1mm)	
	Weight	60g	
Environment	Operating temperature range	-20°C ~ 60°C (-4°F~140°F)	
	Storage temperature range	-40°C ~ 80°C (-40°F ~ 176°F)	
	Relative humidity	95%, no condensation	
	Operating Vibration	5~500Hz, 1.5Grms, Follow IEC60068-2-64	
	Operating Shock	20G peak acceleration(11ms duration) , Follow IEC60068-2-27	
	EMC	CE/FCC	

■ Ordering Information

Part No.	Product	Description
A79.20191.00.0001	AL-2019	16Channel digital output, NPN, 0.5A, 24VDC
A79.23191.00.0001	AL-2329	16Channel digital output, PNP, 0.5A, 24VDC

Note: If some optional parts are offered with the system, additional system certificates may be required in certain regions/countries.
Please contact NODKA for certificate compliance.

AL-3xxx



Specifications

Model Name		AL-3238	AL-3438	AL-3538
AI	Number of Inputs	8		
	Signal Type	-10V~+10V	0~20mA	4~20mA
	Technology	Differential input		
	Internal resistance	~240kΩ	240kΩ	240kΩ
	Resolution	16 bit		
	Input filtering limit frequency	20kHz		
	Maximum sampling rate	25kHz		
	Measurement error	< ±0.1%(full-scale)		
	Electrical isolation	500VAC		
System	Field bus	EtherCAT		
	Minimum cycle time	500us		
	Voltage Input	5VDC		
	Rated current consumption	230mA		
Chassis	Dimensions	(L)100mm x (W)12mm x (H)80mm		
	Installation method	DIN rail that complies with IEC 60715 (width: 35mm, thickness: 1mm)		
	Weight	60g		
Environment	Operating temperature range	-20°C ~ 60°C (-4°F~140°F)		
	Storage temperature range	-40°C ~ 80°C (-40°F ~ 176°F)		
	Relative humidity	95%, no condensation		
	Operating Vibration	5~500Hz, 1.5Grms, Follow IEC60068-2-64		
	Operating Shock	20G peak acceleration(11ms duration) , Follow IEC60068-2-27		
	EMC	CE/FCC Class A		

Ordering Information

Part No.	Product	Description
A79.32381.00.0001	AL-3238	8Channel analog input, -10V~+10V, Differential, 16bit, 24VDC
A79.34381.00.0001	AL-3438	8Channel analog input, 0mA~20mA, Differential, 16bit, 24VDC
A79.35381.00.0001	AL-3538	8Channel analog input, 4mA~20mA, Differential, 16bit, 24VDC

Note: If some optional parts are offered with the system, additional system certificates may be required in certain regions/countries.
Please contact NODKA for certificate compliance.

AL-3xxx



■ Specifications

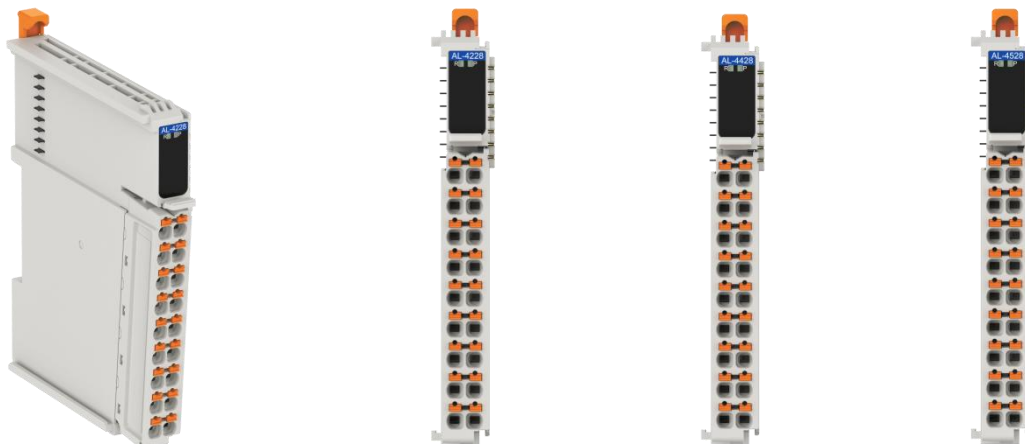
Model Name		AL-3608	AL-3614
Sensor	Number of Inputs	8	4
	Signal Type	Type K/J/T	PT100,PT1000
	Connection method	2 wire	2,3,4 wire
	Conversion time	Configurable, acquiesce 400ms (50Hz/60Hz filter)	Configurable, acquiesce 200ms (50Hz/60Hz filter)
	Measuring range	Depends on the sensor type	
	Resolution	0.1°C	
	Measurement error/uncertainty	±0.3% (full-scale)	
	Electrical isolation	500VAC	
System	Field bus	EtherCAT	
	Voltage Input	5VDC	
	Rated current consumption	95mA	
Chassis	Dimensions	(L)100mm x (W)12mm x (H)80mm	
	Installation method	DIN rail that complies with IEC 60715 (width: 35mm, thickness: 1mm)	
	Weight	60g	
Environment	Operating temperature range	-20°C ~ 60°C (-4°F~140°F)	
	Storage temperature range	-40°C ~ 80°C (-40°F ~ 176°F)	
	Relative humidity	95%, no condensation	
	Operating Vibration	5~500Hz, 1.5Grms, Follow IEC60068-2-64	
	Operating Shock	20G peak acceleration(11ms duration) , Follow IEC60068-2-27	
	EMC	CE/FCC	

■ Ordering Information

Part No.	Product	Description
A79.36081.00.0001	AL-3608	8Channel TC , Type K/J/T, 2 wire, 16bit, 24VDC
A79.36141.00.0001	AL-3614	4Channel RTD, PT100/PT1000/NI100, 4 wire, 16bit, 24VDC

Note: If some optional parts are offered with the system, additional system certificates may be required in certain regions/countries.
Please contact NODKA for certificate compliance.

AL-4xxx



■ Specifications

Model Name		AL-4228	AL-4428	AL-4528
AO	Number of Outputs	8		
	Signal Type	-10V~+10V	0~20mA	4~20mA
	Load	> 5kΩ (short-circuit proof)	<500Ω	<500Ω
	Output error	<±0.1%(full-scale)		
	Resolution	16 bit		
	Conversion time	~400us		
	Electrical isolation	500VAC		
System	Field bus	EtherCAT		
	Voltage Input	5VDC		
	Rated current consumption	85mA		
Chassis	Dimensions	(L)100mm x (W)12mm x (H)80mm		
	Installation method	DIN rail that complies with IEC 60715 (width: 35mm, thickness: 1mm)		
	Weight	60g		
Environment	Operating temperature range	-20°C ~ 60°C (-4°F~140°F)		
	Storage temperature range	-40°C ~ 80°C (-40°F ~ 176°F)		
	Relative humidity	95%, no condensation		
	Operating Vibration	5~500Hz, 1.5Grms, Follow IEC60068-2-64		
	Operating Shock	20G peak acceleration(11ms duration) , Follow IEC60068-2-27		
EMC		CE/FCC		

■ Ordering Information

Part No.	Product	Description
A79.42281.00.0001	AL-4228	8Channel analog output, -10V~+10V, Single, 16bit, 24VDC
A79.44281.00.0001	AL-4428	8Channel analog output, 0mA~20mA, Single, 16bit, 24VDC
A79.45281.00.0001	AL-4528	8Channel analog output, 4mA~20mA, Single, 16bit, 24VDC

Note: If some optional parts are offered with the system, additional system certificates may be required in certain regions/countries.
Please contact NODKA for certificate compliance.

AL-5002



Specifications

Model Name		AL-5002
Encoder	Number of channels	2 x incremental encoder
	Encoder connection	A/B/Z phase differential RS422 input
	Counter	32 bit, binary
	Limit frequency	Max.5Mbps
	Distributed clock	Yes
	Electrical isolation	500VAC
	Voltage Input	5VDC
System	Field bus	EtherCAT
	Voltage Input	5VDC
	Rated current consumption	85mA
Chassis	Dimensions	(L)100mm x (W)12mm x (H)80mm
	Installation method	DIN rail that complies with IEC 60715 (width: 35mm, thickness: 1mm)
	Weight	60g
Environment	Operating temperature range	-20°C ~ 60°C (-4°F~140°F)
	Storage temperature range	-40°C ~ 80°C (-40°F ~ 176°F)
	Relative humidity	95%, no condensation
	Operating Vibration	5~500Hz, 1.5Grms, Follow IEC60068-2-64
	Operating Shock	20G peak acceleration(11ms duration) , Follow IEC60068-2-27
	EMC	CE/FCC

Ordering Information

Part No.	Product	Description
A79.50021.00.0052	AL-5002	2Channel encoder input, DifferentialA/B/Z, Incremental, 5V, 24VDC

Note: If some optional parts are offered with the system, additional system certificates may be required in certain regions/countries.
Please contact NODKA for certificate compliance.