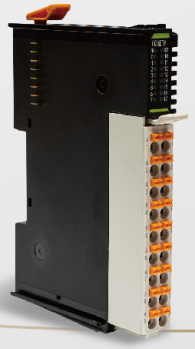
iSpade series **Fieldbus I/O Module**

The iSpade series is the latest compact and versatile remote I/O module, supporting the EtherCAT bus. It offers a wide range of module types, simplified installation due to its compact size and high reliability.

- Support mainstream EtherCAT fieldbus
- Fast data response and strong scalability
- Compact module design with high integration and small size
- Easy installation with tool-free wiring and modular independence
- A wide variety of modules including I/O, analog, temperature, pulse, and serial communication modules
- Support Online diagnostics

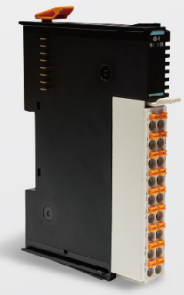
iSpade series I/O **Specification**



Order Number	IBM-2001ECT
Product Description	EtherCAT Coupler Module
Technical Parameters	
Power consumption	100mA@24V
Power Supply	DC24V allowing range 18~30V
Wiring	Power wiring:0.3m2(22AWG)~1mm² (17AWG), Standard Ethernet cable、type-c cable
	Recommended wire diameter:0.3~1mm2, cold conduit length:10mm
Mounting	35mm rail
Dimensions	111.5mm*83.4mm*24.1mm
Environmental Parameters	
Temperature (work)	-20~55°C
Humidity (work)	10%~90%RH, non-condensing
Environment (work)	Non-corrosiveness, no combustible gas, with less conductive dust
Temperature (store)	-25-65°C
Humidity (store)	5%~95%RH, non-condensing
Protection level	IP20
Features	
Ethernet Interface	2 * RJ45
Process data	Max. Input: 1024 bytes, Max. Output: 1024 bytes
Extension Modules	MAX:32
LED Indicator	Power, Ethernet, Internal fieldbus, etc
Bandwidth	10/100M auto-adaptive
Max. length of wire	10OM
Protect Feature	DC24V short circuit protection, reverse polarity
	protection, overvoltage protection
Hot Swap	Not Support

Order Number	IBM-0100PRS
Product Description	Power Relay Module
Technical Parameters	
Power Supply	DC24V±10%
Output Voltage	DC5V
Fieldbus Current	2A(MAX)
Wiring	IO wiring:0.3mm² (22AWG)~1mm² (17AWG)
	Recommended wire diameter:0.3~1mm2, cold conduit length:10mm
Mounting	35mm rail
Dimensions	111.5mm*83.4mm*13mm
Environmental Parameters	
Temperature (work)	-20~55°C
Humidity (work)	10%~90%RH, non-condensing
Environment (work)	Non-corrosiveness, no combustible gas, with less conductive dust
Temperature (store)	-25-65°C
Humidity (store)	5%~95%RH, non-condensing
Protection level	IP20
Output Features	
Number of channel	1 Channel
Type	Voltage Output
LED Indicator	Power、 Alarm
Protect Feature	Short circuit protection
	Reverse polarity protection
Power Isolation	Not support
Power-off retain	Not support

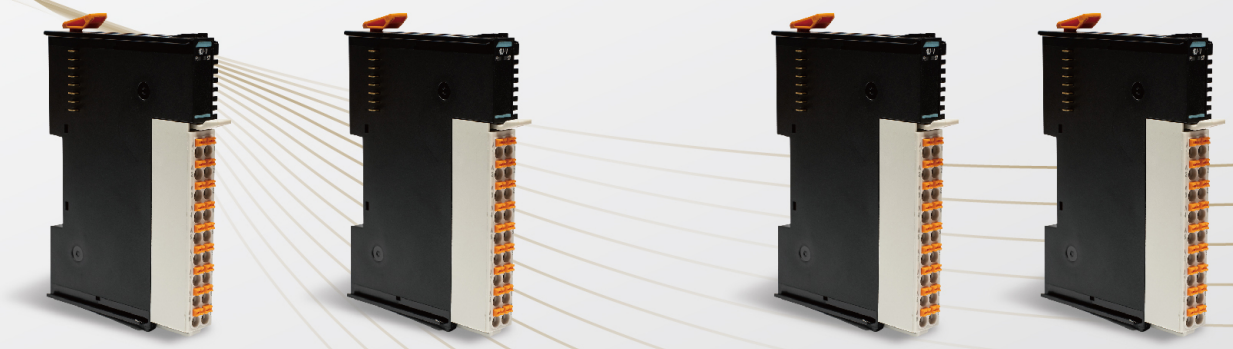
iSpade series I/O **Specification**



Order Number	IBM-1600END / IBM0016ETN
Product Description	Digital Input Module / Digital Output Module
Technical Parameters	
Power consumption	100mA@5V
Electrical Isolation	IO to internal fieldbus:optocoupler isolation 5kV
Power Supply	DC24V±10%
Wiring	IO wiring:0.3mm²(22AWG)~1mm²(17AWG)
	Recommended wire diameter:0.3~1mm2，cold conduit length:10mm
Mounting	35mm rail
Dimensions	111.5mm*83.4mm*13mm
Environmental Parameters	
Temperature (work)	-20~55°C
Humidity (work)	10%~90%RH，non-condensing
Environment (work)	Non-corrosiveness，no combustible gas，with less conductive dust
Temperature (store)	-25-65°C
Humidity (store)	5%~95%RH，non-condensing
Protection level	IP20
Input / Output Features	
Number of Channels	16 channels
Type	Input：NPN/PNP Output：NPN(Low-level)
LED Indicator	16 channel indicators，Power，Alarm
0 signal level (input)	<5 DC
1 signal level (input)	>15 DC
load current (output)	0.5A per channel
leaking current (output)	MAX 1OuA
Protection Feature	Surge and electrostatic protection
Hardware Response	100uS/100uS
Hot Swap	Not support

Order Number	IBM-0400TMN
Product Description	Thermocouple Temperature Input Module
Technical Parameters	
Power consumption	100mA@5V
Electrical Isolation	IO to internal fieldbus:optocoupler isolation 5kV
Power Supply	DC24V±10%
Wiring	IO wiring:0.3mm²(22AWG)~1mm²(17AWG)
	Recommended wire diameter:0.3~1mm2，cold conduit length:10mm
Mounting	35mm rail
Dimensions	111.5mm*83.4mm*13mm
Environmental Parameters	
Temperature (work)	-20~55°C
Humidity (work)	10%~90%RH，non-condensing
Environment (work)	Non-corrosiveness，no combustible gas，with less conductive dust
Temperature (store)	-25-65°C
Humidity (store)	5%~95%RH，non-condensing
Protection level	IP20
Output Features	
Number of Channels	4 channels
Type	K-type thermocouple
LED Indicator	4 channel indicator、Power、Alarm
Scale	K:-200 1370°C、J:200-1200°C、T:-200-400°C、 E:-200-1000°C、N:-200-1300°C、R:-50-1700°C、 S:-50-1700°C、B:250-1800°C、C:0-2320°C
Resolution	24bit
Percision	±0.3%(full load)@25°C
D/A value	K:-2000~13700 : -200.0~1370.0°C J:2000~12000 : 200.0-1200.0°C、 T:2000~4000 : -200.0-400.0°C、 E:-2000~10000 : -200.0-1000.0°C N:-2000~13000 : -200.0-1300.0°C、 R:-500~17000 : -50.0-1700.0°C、 S:-500~17000 :- 50.0-1700.0°C、 B:-2500~18000 : 250.0-1800.0°C、 C:023200 : 0.0-2320.0°C Note:display of idle status: 32767
Protection Feature	Surge and electrostatic protection
Hot Swap	Not support

iSpade series I/O **Specification**



Order Number	IBM-0400ADV / IBM-0400DAV
Product Description	Analog Voltage Input/Output Module
Technical Parameters	
Power consumption	100mA@5V
Electrical Isolation	IO to internal fieldbus:optocoupler isolation 5kV
Power Supply	DC24V±10%
Wiring	IO wiring:0.3mm²(22AWG)~1mm²(17AWG)
	Recommended wire diameter:0.3~1mm2，cold conduit length:10mm
Mounting	35mm rail
Dimensions	111.5mm*83.4mm*13mm
Environmental Parameters	
Temperature (work)	-20~55°C
Humidity (work)	10%~90%RH，non-condensing
Environment (work)	Non-corrosiveness，no combustible gas，with less conductive dust
Temperature (store)	-25-65°C
Humidity (store)	5%~95%RH，non-condensing
Protection level	IP20
Input / Output Features	
Number of Channels	4 channels
Type	Voltage input/voltage output
LED Indicator	Power、Alarm
Scale	Input：0-10.24V、0-5.12V
	Output：0-10V、0-5V、-10-10V、-5-5V
Resolution	16bit
Percision	Input：±0.3%@25°C
	Output：±0.1%(full load)@25°C
Input D/A value	0-65535:0-10.24V、0-65535:0-5.12V
Output D/A value	0-65535:0-10V、0-65535:0-5V、
	0-65535:-10-10V、0-65535:-5-5V
Input Impedance	1M
Common Terminal	Negative common ground terminal input/output
Load	>2K Ω
Protection Feature	Surge and electrostatic protection
Hot Swap	Not support

Order Number	IBM-0400ADI / IBM-0400DAI
Product Description	Analog Current Input/Output Module
Technical Parameters	
Power consumption	100mA@5V
Electrical Isolation	IO to internal fieldbus:optocoupler isolation 5kV
Power Supply	DC24V±10%
Wiring	IOwiring:0.3mm²(22AWG)~1mm²(17AWG)
	Recommended wire diameter:0.3~1mm2，cold conduit length:10mm
Mounting	35mm rail
Dimensions	111.5mm*83.4mm*13mm
Environmental Parameters	
Temperature (work)	-20~55°C
Humidity (work)	10%~90%RH，non-condensing
Environment (work)	Non-corrosiveness，no combustible gas，with less conductive dust
Temperature (store)	-25-65°C
Humidity (store)	5%~95%RH，non-condensing
Protection level	IP20
Input / Output Features	
Number of Channels	4 channels
Type	Voltage input
LED Indicator	Power、Alarm
Input Scale	0-20.48mA、4-20.48mA
Output Scale	0-20mA、4-20mA
Resolution	16bit
Percision	Input：±0.3%@25°C Output：±0.1%(full load)@25°C
D/A value	Input：0-65535:0-20.48mA、0-65535:4-20.48mA
	Output：0-65535:0-20mA、0-65535:4-20mA
Input Impedance	IM
Common Terminal	Negative common ground terminal input
Output Load	50~500Ω
Protection Feature	Surge and electrostatic protection
Hot Swap	Not support