

1.4.9 USB-2055-32



The USB-2055-32 is a full-speed USB device with 16 digital input and digital output channels module. The USB-2055-32 offers 16 isolated channels for digital input and 16 isolated channels for digital output. Either sink-type or source-type digital input can be selected via wire connections. All digital input channels are also able to be used as 16-bit counters. The USB-2055-32 supports source-type output with short circuit protection. There are options to enable both power-on and safety values. The USB-2055-32 has 32 LED indicators that can be used to monitor the status of the digital input and digital output channels. 4 kV ESD protection and 3750 VDC intra-module isolation are standard.

Digital Input		
Channels		16
Type	Dry Contact	Source
	Wet Contact	Sink/Source
On Voltage Level	Dry Contact	Close to GND
	Wet Contact	+10 VDC ~ +50 VDC
Off Voltage Level	Dry Contact	Open
	Wet Contact	+4 VDC Max.
Effective Distance For Dry Contact		500 meters Max.
Input Impedance		10 K Ω
Overvoltage Protection		70 VDC
Counter	Max. Count	65535 (16-bit)
	Max. Input Frequency	500 Hz
	Min. Pulse Width	1 ms
Digital Output		
Channels		16
Type		Open Collector, Sink (NPN)
Load Voltage		+3.5 ~ +50 VDC
Max. Load Current		600 mA/Channel
Overvoltage Protection		60 VDC

Overload Protection	1.4 A (with short-circuit protection)
Power-on Value	Yes
Safe Value	Yes
Communication	
Interface	USB 2.0 Full-Speed
Watchdog	1 Hardware watchdog (1.6 second)
	1 Software watchdog (Programmable)
LED Indicators	
System LED Indicators	3 LED as Power, Run and Error
I/O LED indicators	32 LEDs as Digital Input and Output Indicators
EMS Protection	
ESD (IEC 61000-4-2)	4 kV contact for each terminal
	8 kV air for random point
Mechanical	
Dimensions (W x L x H)	31 mm x 147 mm x 129 mm
Environmental	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-40 ~ +85 °C
Humidity	10 ~ 95% RH, non-condensing
Power	
Power Consumption	2.2 W