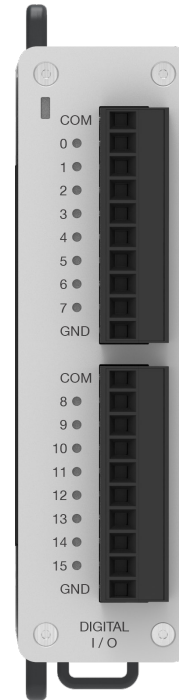


Digital Input & Output Module

IG41 Datasheet



ENCLOSURE

Dimensions (HxWxD)	100 mm x 30mm x 102 mm (36mm width with backplane connector)
Weight	0.25kg (0.55lbs)
Mounting	DIN-rail, Wall mount

ENVIRONMENTAL

Operating temperature	-40°C to +70°C / -40°F to +158°F
Storage temperature	-40°C to +85°C / -40°F to +185°F
Operating humidity	10% RH to 90% RH, noncondensing
Storage humidity	5% RH to 95% RH, noncondensing
Ingress protection	IP20

IG41 Digital Input & Output Module

GENERAL

Number of inputs/outputs 16 - 2 banks configurable input/output

Commons 2 (1 per bank)

Connectivity Screw terminal

System LED	LED State	Indicates
	Solid Green	All functionality working
	Blinking Red	Reboot required
	Solid Red	Error - contact Samsara support

Channel LED	LED State	Indicates
	Solid Blue	Data input channel active
	Solid Orange	Data output channel active

INPUT

Input voltage range (nominal) 12 - 24V VDC sink/source

Input voltage range (full) 9 - 30V VDC sink/source

Maximum voltage 30 VDC

Max input frequency 3 kHz

Input impedance 30k Ohm @ 24 VDC

Input current (typical) 0.8 mA @ 24 VDC

Maximum OFF current 2.0 mA

ON voltage level >9.0 VDC

OFF voltage level < 3.0 VDC

Hot swappable No

IG41 Digital Input & Output Module

OUTPUT

Output voltage range (nominal)	12 - 24V VDC source
Output voltage range (full)	10 - 30 VDC
Maximum voltage	30 VDC
Output impedance	30k Ohms
Maximum current per common	1 A
Minimum output current	0.1 mA @ 24VDC
Maximum output current	0.2 A per output
Maximum leakage current	10 uA

SHOCK & VIBRATION

Free fall	IEC 60068-2-32 (Freefall)
Operating shock	IEC 60068-2-27, 30 g, 11 ms half sine; 50 g, 3 ms half sine
Operating vibration	IEC 60068-2-64, 5 Grms, random, 5 ~ 500 Hz IEC 60068-2-6, 5 g, sinusoidal, 10 Hz to 500 Hz

IG41 Digital Input & Output Module

SAFETY, HAZARDOUS LOCATIONS, & COMPLIANCE

Hazardous locations	US (UL) <ul style="list-style-type: none">· Class I, Division 2, Groups A, B, C, D, Temperature Class T4· Class I, Zone 2, Group IIC
Safety & hazardous locations standards	<ul style="list-style-type: none">· UL/IEC 61010-1 (Safety)· UL/IEC 61010-2-201 (Safety)· UL 121201, CSA C22.2#213 (Hazardous Locations)
Electromagnetic compatibility	<ul style="list-style-type: none">· FCC 47 CFR Part 15B, Class A· ICES-003 Class A

Note: In the United States (per FCC 47 CFR), Class A equipment is intended for use in commercial, light-industrial, and heavy-industrial locations. In Europe, Canada, Australia and New Zealand (per CISPR 11) Class A equipment is intended for use only in heavy-industrial locations.

For use in hazardous locations, device needs to be installed in a tool secured NEMA 4X enclosure.