DI2-16 for imc CRONOS-XT (CRXT/DI2-16)

16 digital inputs

The digital DI2-16 module enable sampling of digital inputs having TTL/CMOS or 24 V logic levels. The level can be set separately for each group of eight inputs. The groups are jointly isolated from the system.

CRXT/DI2-16
(Fig. similar)

Highlights

- Galvanically isolated 4 Bit groups
- Configurable for 5 V or 24 V level (of 8 Bit groups)

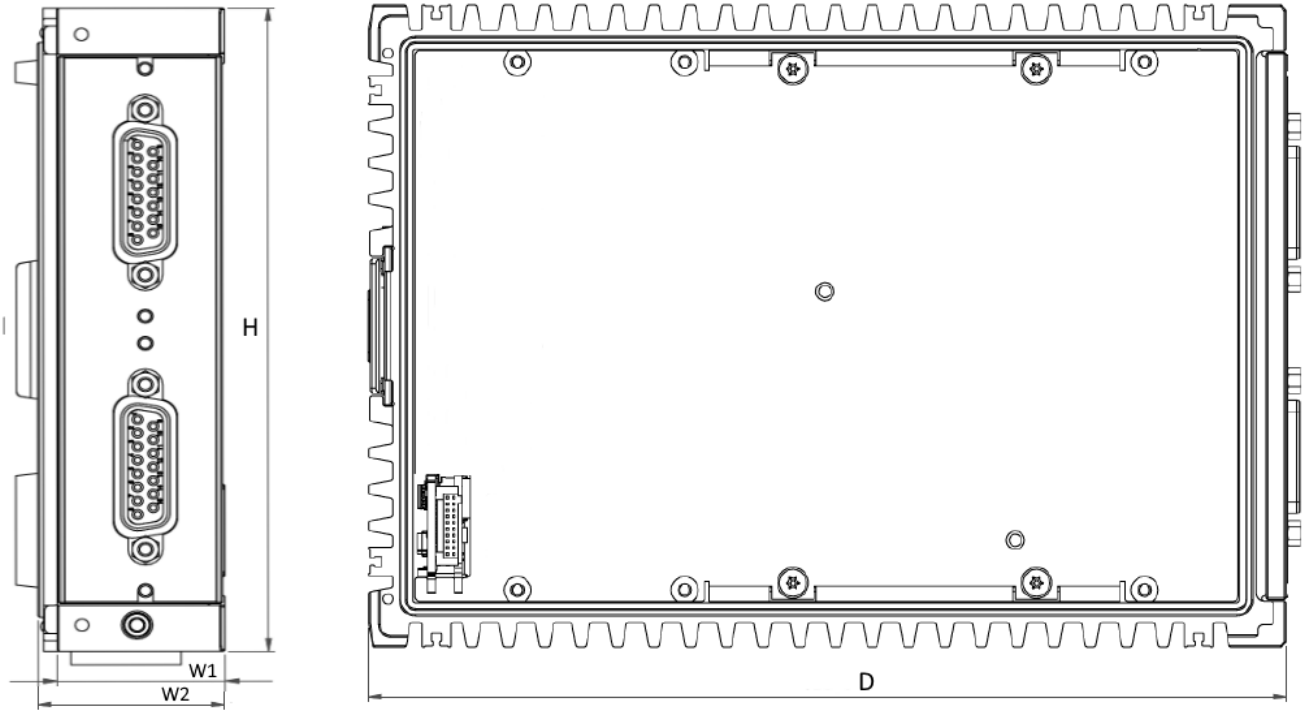
imc CRONOS-XT - Maximizes flexible modularity

An imc CRONOS-XT system is composed of a base unit and one or more imc CRONOS-XT modules. The imc click mechanism offers a mechanically strong connection between several imc CRONOS-XT modules. At the same time, the "click" establishes an electrical connection to the system bus and the power supply.

Overview of available variants

Order Code	Signal connections	power consumption	weight	housing	article no.
CRXT/DI2-16	DSUB-15		0.7 kg	XT1	11100029

Dimensions



Shown in standard operating orientation: housing type XT1

Housing type:	XT1	XT2	XT3	XT4	Remarks
W: Width in mm	30.5 34	61 64.5	91.5 95	116.9 120.4	W1: modular spacing (effective stacking width) W2: complete width
H: Height in mm	130				
D: Depth in mm	186.5				

Sealing, IP rating and environmental specs

A single CRXT slice cannot achieve an IP protection level at first because it is functionally open at the side. The specified specifications are always only valid for a complete in a controlled environment clicked (closed) CRXT system. Only after it has been combined with a CRXT base unit (plus power module), CRXT slices if applicable, and the final handles to form a CRXT system can an evaluation be made. The specification for shock, vibration and IP degree of protection applicable to the entire device is then derived from the weakest specification of the CRXT slices used in this combination. They assume that the individual CRXT slices are each mounted in conjunction with the additional stabilizing interconnect brackets (included in the standard accessories supplied).

According to IEC 60529 the Ingress Protection (IP) rating refer to protection classes provided by a housing, the protection of the electrical parts within the housing shell. If all functionally accessible contacts of the sockets are also to be protected, the corresponding plugs must be connected to all sockets. In many cases, a protective cover can also be used alternatively on unused sockets.

Included accessories

Sealing Caps and mounting accessories		
2x ACC/CAP-DSUB-15-IP67	Sealing Cap IP67 for DSUB-15 sockets	13500342
2x CRXT/BRACKET-CON	interconnect brackets, intended for increased stability	11100040

Miscellaneous
Test certificate
Getting started with imc CRONOS-XT (one copy per delivery)

Optional accessories

DSUB-15 plug (solder) IP67		
CRXT/DSUB15M-IP67	IP67 DSUB-15 plug male	11100073

DSUB-15 plug (IP65)		
ACC/DSUBM-DI4-8-IP65	IP65 DSUB-15 plug with screw terminals for digital inputs	13500221

Dust protection		
ACC/CAP-DSUB-15	dust protection cap for DSUB-15	13500339

Miscellaneous		
ACC/DSUBM-LOCKING-BOLT-L	extended length locking bolts (2 pcs); adapting standard terminal plugs (ACC/DSUBM-xx) for interlocking installation on CRXT (*mechanical adaption/retrofit, only*)	13500327
Report set of function test for each device		

Technical Specs - DI2-16

Parameter	Value typ.	min. / max.	Remarks
Channels	16		groups of 4 Bit with common ground reference, galvanic isolation between groups
Input voltage level	TTL 24 V		configurable globally for 8 Bit at DSUB using the "LEVEL" pin: "LEVEL": Jumper to "LCOM" "LEVEL": unconnected
Max input voltage	5.5 V 30 V		TTL mode 24 V mode
Input configuration	differential		groups of 4 Bit galvanic isolation between groups of 4 Bit
Isolation strength	±150 V		to system ground (housing, CHASSIS, PE) and between groups of 4 Bit (tested ±200 V)
Switching time HIGH-LOW LOW-HIGH	 34 µs 3 µs	 130 µs 30 µs	edge detection; over entire temperature range
Additional system delay	typ. 400 µs ± 100 µs		delay from input transition to changing state available in imc Online FAMOS
Input current		max. 500 µA	
Switching threshold TTL (5 V) 24 V	 V_{Lmax} = 0.8 V V_{Lmax} = 5.0 V	 V_{Hmin} = 2.0 V V_{Hmin} = 8.0 V	
Internal supply voltage, available at user pin "HCOM"	5 V max. 100 mA		isolated reference ground of both "HCOM" and "LEVEL" is "LCOM"
Terminal connection	DSUB-15 / 8 Bit		ACC/DSUBM-DI4-8