

# **DAC-8 for imc CRONOS-XT**

# 8 analog control signals

The DAC-8 is designed to provide analog output of up to 8 voltages. The outputs can be derived from a mathematical combination of measurement channels, using imc Online FAMOS.

# **Highlights**

- ±10 V level at max. ±10 mA output driver capability
- 16 bit resolution
- deterministic startup output state 0 V ensured, without undefined transient states
- short-circuit proof against ground



CRXT/DAC-8 (Fig. similar)

# 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.



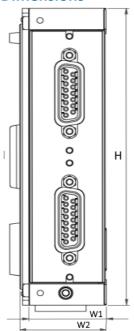


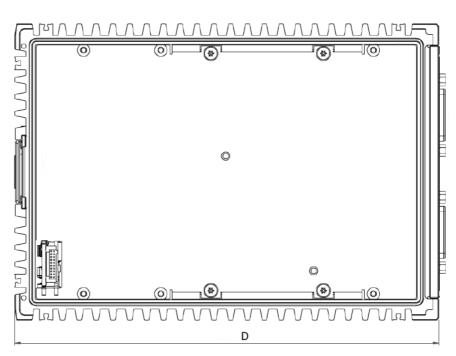
# **Models and Options**

## Overview of available variants

Order Code	Signal connections	weight	housing	article no.
CRXT/DAC-8	DSUB-15	1.1 kg	XT1	11100078

#### **Dimensions**





Shown in standard operating orientation: housing type XT1

Housing type:	XT1	XT2	XT3	XT4	Remarks
W: Width in mm	30.5	61	91.5	116.9	W1: modular spacing (effective stacking width)
	34	64.5	95	120.4	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.



# **Accessories and Connectors**

ACC/DSUBM-LOCKING-BOLT-L extended length locking bolts (2 pcs)

# **Included accessories**

Sealing Caps and mounting accessories		
2x ACC/CAP-DSUB-15-IP67	sealing Cap IP67 for DSUB-15 sockets	13500342
CRXT/BRACKET-CON	interconnect brackets, intended for increased stability; set of 2 units for top and bottom side	11100040

Documents	
device certificate	
Getting started with imc CRONOS-XT (one copy per delivery)	

# **Optional accessories**

DSUB-15 plug (solder) IP6	7	article no.
CRXT/DSUB15M-IP67	IP67 DSUB-15 plug male	11100073
DSUB-15 plug (IP65)		
ACC/DSUBM-DAC4-IP65	IP65 DSUB-15 plug with screw terminals for 4 analog outputs	13500223
Dust protection caps		
ACC/CAP-DSUB-15	dust protection cap for DSUB-15	
Miscellaneous		
CRXT/BRACKET-CON-BOT	interconnect bracket with mounting option (180°) for the bottom side of the CRXT module	

For the slices with DSUB-15 sockets, the sealed terminal plugs ACC/DSUBM-xxx-IP65 must be used - regardless of the sealing properties: The simple standard plug (ACC/DSUBM-xxx without suffix [-IP65]) have shorter locking screws and therefore cannot be fixed to CRXT slices. However, they can be retrofitted with the long bolts. With long bolts: only for CRXT, with short standard bolts: only for CRFX, CRC, C-SERIES etc.

Documents			
SERV/CAL-PROT	Calibration protocol per amplifier		
	imc manufacturer calibration certificate with measurement values and list of calibration equipment used (pdf).		
SERV/CAL-PROT-PAPER	Calibration protocol per amplifier (paper print)	150000578	
	imc manufacturer calibration certificate with measurement values and list of calibration equipment used with signature and seal.		

Device certificates and calibration protocols: Detailed information on certificates supplied, the specific contents, underlying standards (e.g. ISO 9001 / ISO 17025) and available media (pdf etc.) can be found on our website, or you can contact us directly.

13500327



# **Technical Specs - CRXT/DAC-8**

Parameter	Value typ.	min. / max.	Remarks
Outputs	8		
Output level	±10 V		
Load current		max. ±10 mA	short circuit protection
Resolution	16	bit	
Linearity		max. 4 LSB	14-bit no missing codes
Max. output rate	5	kHz	
Analog bandwidth	50	kHz	-3 dB, low pass 2nd order
Accuracy	±4 LSB	3 (16 bit)	25°C
Offset error	<10 mV	<17 mV	25°C
Offset drift	0.06 mV / K		
Total offset error		<20 mV	over entire temperature range
Gain error	<0.29 %		25°C
Gain drift	25 ppm / K		
Total gain error		<0.8 %	over entire temperature range
Reference ground	AG	GND	all channels with one common, galvanically connected reference ground
Terminal connection	DSUB-15		standard

# **Contact imc**



## **Address**

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E-Mail: <u>info@imc-tm.de</u>

Internet: <a href="https://www.imc-tm.com">https://www.imc-tm.com</a>

# **Tech support**

If you have problems or questions, please contact our tech support:

Phone: (Germany): +49 30 467090-26

E-Mail: hotline@imc-tm.de

Internet: <a href="https://www.imc-tm.com/service-training/">https://www.imc-tm.com/service-training/</a>

#### Service and maintenance

Our service team is at your disposal for service and maintenance inquiries:

Phone: (Germany): +49 30 629396-333

E-Mail: <u>imc-service@axiometrixsolutions.com</u>

Internet: <a href="https://www.imc-tm.com/service">https://www.imc-tm.com/service</a>

## imc ACADEMY - Training center

The safe handling of measurement devices requires a good knowledge of the system. At our training center, experienced specialists are here to share their knowledge.

E-Mail: <u>schulung@imc-tm.de</u>

Internet: <a href="https://www.imc-tm.com/service-training/imc-academy">https://www.imc-tm.com/service-training/imc-academy</a>

# **International partners**

You will find the contact person responsible for you in our overview list of imc partners:

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