

DAC-8 for imc CRONOS-SL/compact

8 Analog Control Signals

DAC-8, which enables analog output of up to 8 analog values, is a modular plug-in for imc CRONOS*compact* and available as a configuration module for CRONOS-SL. The outputs can be defined as the results of calculations performed by imc Online FAMOS on data from combinations of measurement channels.

Highlights

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

imc CRONOS*compact*- modular measurement system

imc CRONOS*compact* is a modular and reconfigurable hardware a "rack"-based series of devices available in a variety of housing sizes and device frames. imc CRONOS*compact*(CRC) plug-in-modules can be inserted into the system (CRC-400 / CRC-2000G).

Once the modules are plugged into a portable or rack-based housing, they are electrically connected to the CRC-system and are supplied by the system with power. The data storage will be managed by the CRC-system.

Rack-based modules ("-R") differ from the standard modules only in terms of the front panel's attachment mechanism.



imc CRONOScompact plug-in-modules



imc CRONOScompact portable housing

Overview of the available variants

Standard version		ET Version *	
Order Code:	article no.	article no.	Remarks
CRC/DAC-8	11700069	11710041	for imc CRONOS <i>compact</i>
CRC/DAC-8-R	11700130	11710089	for imc CRONOS <i>compact</i> RACK
CRSL/DAC-8-D		11800041	CRONOS-SL variant with DSUB-15
CRSL/DAC-8-BNC		11800042	CRONOS-SL variant with BNC sockets

Included accessories for imc CRONOS*compact*:

- 2x ACC/DSUBM-DAC4, DSUB-15 plug with screw terminals for 4-channel groups

Optional accessories:

- ACC/DSUB-DAC4-IP65, 15-pin DSUB-clamp terminal adapted to imc CRONOS-SL for each bank of 4 analog output channels

* ET: Version in extended temperature range

Technical Specs - CRC/CRSL/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	50 kHz		with CRC, CRSL
Analog bandwidth	50 kHz		-3 dB, low pass 2nd order
Additional system delay	typ. 400 μ s \pm 100 μ s		
Accuracy	± 4 LSB (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
Isolation impedance	500 k 1 nF		
Internal reference ground	AGND		all channels with one common, galvanically connected reference ground
External reference ground	CHASSIS, metal housing		DAC outputs as one unit (8 channels), galvanically isolated from housing
Terminal connection	DSUB-15		standard