DO-16 for imc CRONOS-PL/-SL/compact

Datasheet version 3.3, released: 24.11.2011

16 Digital Outputs

CRPL/DO-16

CRC/DO-16

The modular plug-in **DO-16** for imc CRONOS-PL/*compact* (or configuration module for imc CRONOS-SL) offers 16 isolated driver-capable control signals. The signal states can be derived mathematically from channel measurement data by imc Online FAMOS, or influenced by means of imc CRONOS-PL/-SL/ *compact*'s trigger machine. This makes it possible to realize control functions using the simplest methods.

Order code:

	Article number	Remarks
CRPL/DO-16	1080013	for installation in an imc CRONOS-PL housing
CRPL/DO-16-ET	1081011	version in extended temperature range
CRSL/DO-16-D	1180039	for installation in an imc CRONOS-SL housing
CRC/DO-16	1170063	for installation in an imc CRONOS*compact* housing
CRC/DO-16-ET	1171037	version in extended temperature range
CRC/DO-16-R	1170126	for installation in an imc CRONOS*compact* 19" RACK
CRC/DO-16-R-ET	1171085	version in extended temperature range

Physical structure:

- Plug-in module for imc CRONOS-PL/*compact* systems, occupying one slot.
- Only to be retrofitted at factory or installed at purchase.

Interconnections:

- 2x DSUB-15 terminals for each group of 8 inputs

Included accessories for imc CRONOS-PL/*compact*:

Connection terminal:

- 2x **ACC/DSUB-DO8**, 15-pin DSUB connection terminal for 8-bit groups

Included accessories for imc CRONOS-SL:

Power supply:

- provided imc CRONOS-PL/-SL/compact unit
- Additional power consumption of installed module: 2.6 W

Operating conditions:

- The module varieties respective operating conditions (with or without an extended temperature range) depend on the corresponding housing type.

Installed software:

- The module is fully supported by the imc CRONOS-PL/-SL/compact operating software. The entire functionality, particularly the parameterization, storage and online computations is provided.

Data storage:

- Output channels cannot be saved by the software, however the virtual channels from which the output data are derived can be saved.

Remarks:

- If the output data are to be derived from calculations rather than controlled by trigger, the personal analyzer Online FAMOS is required. With imc CRONOS-PL-3 and larger models, this doesn't come standard but optionally.

Optional accessories:

Connection terminals:

- **ACC/DSUB-DO8-IP65**, 15-pin DSUB connection terminal for each 8-bit group

DO-16 digital outputs

Technical Datasheet version 3.3

Parameter	typ.	min./ max.	Remarks
Channels	16		two 8-bit groups, isolated, common reference potential ("LCOM“) for a group
Terminal connection	DSUB-15		ACC/DSUB-DO8(-IP65)
Isolations strength	±50 V		to system ground (protection ground)
Output configuration	totem pole (push pull) *or* open-drain		configurable with wire jumper ("ODRN“ - "LCOM“) in the connector pod
State following system start	High resistance (high-Z)		Independent of output configuration (OPDRN-pin)!
Activation of the output stage following system start	upon first preparation of measurement		with initial states which can be adjusted in the experiment (High / Low) in the selected output configuration (OPDRN-pin)
Output level	TTL *or* max. U_{ext} -0.8 V		internal isolated supply voltage by means of connecting an external supply voltage U_{ext} with "HCOM“, U_{ext} = 5 V to 30 V
Max. output current (typ.) TTL 24 V-logic open-drain open-drain with intern. 5 V supply	*HIGH* 15 mA 22 mA ---	*LOW* 0.7 A 0.7 A 0.7 A 20 mA	external inverse diode needed with inductive load
Output voltage TTL 24 V-logic (U_{ext} = 24 V)	*HIGH* >3.5 V >23 V	*LOW* 0.5 Ω * I_{low} 0.5 Ω * I_{low}	with load current: I_{high} = 15 mA, I_{low} ≤0.7 A I_{high} = 22 mA, I_{low} ≤0.7 A
Internal supply voltage available at contacts	5 V, 160 mA isolated		per 8-bit group; VCC_int = 5 V
Switching time	<165 µs		