

## Product Information

# SIQUAD DIO-8

### Characteristics

The SIQUAD **DIO-8 Plug-in Unit** offers computer-controlled signal conditioning of up to 8 digital input signals and drives 8 relay outputs. The inputs are insulated by optocouplers. The relay outputs can be configured per channel by jumpers to make or break. Front panel LEDs indicates switching states of inputs and outputs.



With the 4Z unit inputs can be also configured with parameter setting software DaSoft as simple frequency inputs for conditioning of digital frequency signals. A maximum of 4 frequency inputs is possible. They can be set as FV converter or incremental encoder. Signal output (FV, Z mode) is digital via Ethernet and CAN. Parameter setting is done with the software DaSoft.

### Technical Data

<b>General</b>	Channels/unit	8 digital inputs, isolated 8 relay contacts at output
	sample rate	20 kHz
	Digital output	SPI (internal), CAN
	Input protection	± 100 V, ESD IEC 1000-4-2
	Input impedance	200 kΩ
	min. input frequency	ca. 1 Hz
	Input sensitivity	0.5, 1.0, 2.5, ≥ 5.0 V <sub>pp</sub>
	Supply voltage	+5 V / 450 mA
	Environmental temperature	0..+50 °C
	Connection	2x 16-pole screw terminals
<b>Inputs as 8 DI (opto de-coupled)</b>	High-level	+ 3.5..60 V
	Low-level	- 30..+1 V
	Input current	appr. 6 mA (0..30 V) 6..36 mA (-30..+60 V)
	max. input frequency	20 kHz
<b>Inputs as FV converter max. 4</b>	Range	5, 10, 20, 50, 100, 200, 500 Hz, 1, 2, 5, 10, 20, 50, 100, 200, 500, 1000 kHz
	resolution	min. 12 bit
	max. dynamics	10 kHz
<b>Inputs as Incremental counter, max. 4</b>	Range	100..10 <sup>6</sup> pulses
	resolution	16 bit
	max. counter frequency	1 MHz
<b>Outputs as relay contacts</b>	Switch currents	max. 2 A or 10 A
	Switch voltage	max. 220 V DC
	Switch power	max. 60 W
	Contact resist.	50 mΩ
	max. output frequency	appr. 15 Hz
	Switching cycles	mechanical min. 10 <sup>8</sup> electrical min. 10 <sup>5</sup>

### Dimensions

19" plug-in unit, 3 U height, 5 U (10 U) width, depth 160 mm

### Ordering Code

1.  
SIQUAD-DIO8-

1. **Model extension**

4Z	count function for 4 counters
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# SIQUAD AO4

### Characteristics

The SIQUAD **AO4 Plug-in Unit** provides up to 4 analog outputs. The signal level can be set by the parameter setting software or via a LabVIEW application.



### Technical Data

<b>General</b>	Channels/unit	4 analog outputs, isolated to system
	DA converter	4 x 16 bit
	Digital output	SPI (internal), CAN
	Supply voltage	+5 V / 450 mA
	Environmental temperature	0..+50 °C
<b>Outputs</b>	Voltage output	± 10 V
	max. load	± 10 mA
	Current output	± 20 mA (option)

### Dimensions

19" plug-in unit, 3 U height, 5 U width, depth 160 mm

### Ordering Code

1.   
SIQUAD-AO4-  -

1. **Output**

U	Voltage ± 10 V to BNC socket
U/I	Voltage or current to BNC
UI	Voltage and current to BB7

2. **Terminal**

BNC	BNC socket
BB7	7-pole Binder socket (only UI)