SlimLine

16+8 digital I/O expansion Module

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The SlimLine's 16+8 I/O expansion module allows the acquisition of up to 24 Digital I/Os through its I²C™ High-Speed bus aside of the SlimLine CPUs.
The Power Save function, adopted to control relay coils, allows a great energy saving and consequently, a strong reduction of dissipated power.
Each digital input/output is equipped with LED status indicator.
The module may acquire a bi phase encoder (rotary or linear) with a max frequency of 50kHz, edge detection algorithm and index.
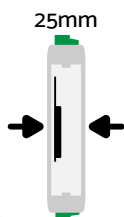
The use of a programmable FPGA on board allows the solution of "Time-critical" problems that can not be solved with traditional PLC systems. The module is engineered in a compact self-extinguishing UL94 V-0 PC/ABS enclosure; it is directly grafted onto DIN rails according to the standards EN50022/IEC60715.

The I/O's connections are made through extractable TB for an easier maintenance. To connect the extension modules to the CPU, it needs to use the proper bus extension cables (Code CBL074*000 and/or CBL045*000) to be ordered separately.
Up to 16 modules can be connected to the CPU module (to be verified according to the CPU module used).

SLIM

Engineered in ultra compact self-extinguishing UL94 V-0 PC/ABS enclosure, suitable for DIN rail mount according to the standard DIN EN60715.
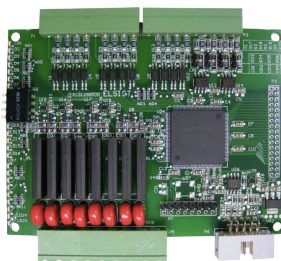
25mm

MODULAR

The system is expandable with up to 16 I/O modules, allowing a maximum of 772 digital I/O on local bus.

Low power

Powered from I²C™ bus 5vdc@0.75W only, "Power save" function on Relay coils to save energy. These devices are suitable for **energy critical systems**.

Wide operating temperature

With an operating temperature from -20 to +70°C, these devices are suited for **environment critical applications**.

Embedded version available

Build your own custom control system, reducing time to market and keeping costs down thanks to the wide variety of CPUs and I/O cards. Easy integration of custom made I/O cards through the standard I²C bus.
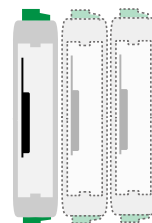
This module is equipped with

- FPGA for "Time critical" application
- "Power save" Function
- 16 insulated digital input (1 encoder 50Khz)
- 8 digital output Relay or SSR
- 1 I²C™ High-speed expansion bus

The module is available in 2 versions:

- Relay version: 16 digital In, 8 Relay Out, I²C Bus.
- SSR ZC Version: 16 digital In, 8 SSR ZC Out, I²C Bus.

Version	Relay	SSR Zc
Code	PCB129*001	PCB129*101
Power supply (from expansion bus)	5V 150mA max. (1)	
Digital inputs	16 Optoisolated 10-30Vdc, 7mA@24V	
	12 of which PNP/NPN	
	4 of which PNP only, may be set for 5Vdc operation	
Digital outputs	8 Relay 5A@250Vac/5A@30Vdc max. (3)	8 SSR Zero-Cross 2Arms 20-240Vrms (-20 to 25°C), 1Arms (70°C) (3), I²T for fusing: 8A²s Zero-Cross Turn-On Voltage: 20V min Latching Current: 100mA min (AC only)
Bi phase, edge detection, index, encoder management	Nr 1 Fmax 50Khz (2)	
Status indicator	Module Status, I/O Status	
Environment	Operating temperature: From -20 to +70°C	
	Storage temperature: From -40° to +80°C	
	Relative humidity: Max. 90%	
Dimension and weight	Dimensions: 22.5 mm L x 101 mm W x 120 mm H	
	Weight: 150g	
Approvals	CE, RoHS	
Warranty	2 Years	

Notes:
(1) All inputs ON and all Outputs ON (worst case)
(2) The encoder must be provided of Push-Pull 10-30Vdc output
(3) 1 common for 8 Output