Open Frame I/O on CANopen Interface

The input and output items can be configured and dislocated on environment in function of the necessities. They can be dislocated in groups. Every group is ruled by a Node and in the same group several types of items can be associated such as analogical or digital Inputs and Outputs, and rapid impulse counter.

Description of several units.

Terminal Boards	Description
OPBASOCAN0	CANopen node unit. It provides signals: n. 32 Digital Outputs with neat relay range 110Vac-1A / 30Vdc-5A, n. 1 Analogical Output (-10V … +10V, resol. 12 bit). Led for signalising.
OPBASICAN0	CANopen node unit. It provides signals: n. 48 Digital Inputs PNP 24Vdc, n. 3 Analogical Inputs (0V … +10V, resol. 10 bit). Led for signalising.
OPBASIOCAN1 OPBASIOCAN2	CANopen node unit. It provides signals: n. 48 Digital Inputs PNP 24Vdc, n. 5 Voltage Analogical Inputs (0…+10 V, resol. 12 bit), n. 1 Current Analogical Inputs (4..20mA, resol. 12 bit), n. 1 Counting Input, TTL levels, maximum frequency 2 MHz., resol. 16 bit, Digital Output in function of model : • OPBASIOCAN1: n. 32 neat contacts of relay with range 110Vac - 5A / 24Vdc-5 A; • OPBASIOCAN2: n. 30 outputs of type Mosfet high current [2 A for each output], n. 2 outputs neat contacts of relay with range 110Vac - 5A / 24Vdc-5 A; n.2 Analogical Output (-10 … +10 V, resol. 12 bit). Led for signalising (Inputs/Outputs status, diagnostic, settings) and two digit display for card address showing.
OPBASIOCAN4	CANopen node unit. It provides signals: n. 16 Digital Inputs PNP 24Vdc, n. 2 Voltage Analogical Inputs (0…+10 V, resol. 12 bit), Digital Outputs: • n. 30 outputs of type Mosfet high current [2 A for each output], • n. 2 outputs neat contacts of relay with range 110Vac - 5A / 24Vdc-5 A; n.2 Analogical Output (-10 … +10 V, resol. 12 bit). Led for signalising (Inputs/Outputs status, diagnostic, settings) and two digit display for card address showing.
OPNOCANC0	CANopen node unit. Includes 1 analogical output (-10 … +10 V, resol. 12 bit.)

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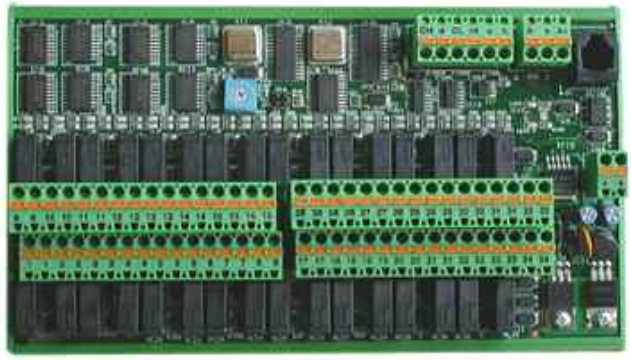
OPIOCAN0	Peripheral for CANopen node. It provides : n. 1 output with neat contact range 110Vac-1A / 30Vdc-5A, n. 7 outputs of type transistor PNP range 24 Vdc-0,5 A, protected against short-circuit n. 16 opt-isolated PNP digital inputs 24 Vdc. Led for signalising It can be configured with 24 inputs and no outputs.
OPADCAN0	Peripheral for CANopen node with 8 analogical inputs. Input signal 0 – 10 Vdc
OPCVCAN0	Peripheral for CANopen node with 3 fast impulse counter, input is encoder type, TTL levels, Fmax 300 KHz
OPSTBUSCAN	Item for concentration of CAN signal and supply voltage.

The terminal boards, exception of OPADCAN0, need a 24 Vdc supply. All terminal boards of input and output modules are equipped with extractable terminals, with spring connection, for the wiring of signal and power supply. The housing of terminal boards is foreseen on OMEGA guide.

Technical Characteristics

- The degree of protection IP20.
- The working temperature is 0 +55 centigrade degree.
- The storing temperature is –20 +70 centigrade degree
- The maximum degree of damp is 90% with no condensation.

Pictures and dimension of models

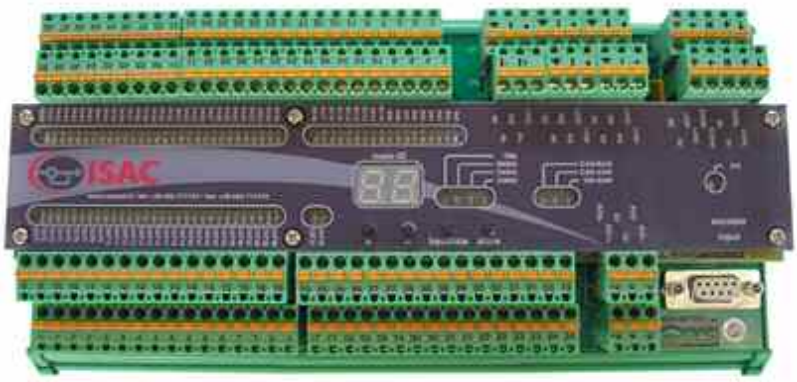


OPBASOCAN0

HEIGHT	120,0 mm
WIDTH	210,0 mm
DEPTH	70,0 mm

OPBASICAN0

HEIGHT	120,0 mm
WIDTH	140,0 mm
DEPTH	70,0 mm



OPBASIOCAN1

HEIGHT	126,0 mm
WIDTH	240,0 mm
DEPTH	75,0 mm

OPBASIOCAN2

HEIGHT	126,0 mm
WIDTH	240,0 mm
DEPTH	75,0 mm

OPBASIOCAN4

HEIGHT	126,0 mm
WIDTH	240,0 mm
DEPTH	75,0 mm

OPNOCANC0

HEIGHT	120,0 mm
WIDTH	75,0 mm
DEPTH	55,0 mm

OPSTBUSCAN

HEIGHT	80,0 mm
WIDTH	50,0 mm
DEPTH	55,0 mm

OPIOCAN0

HEIGHT	120,0 mm
WIDTH	85,0 mm
DEPTH	70,0 mm

OPADCAN0

HEIGHT	120,0 mm
WIDTH	75,0 mm
DEPTH	55,0 mm

OPCVCAN0

HEIGHT	120,0 mm
WIDTH	75,0 mm
DEPTH	55,0 mm

To every interface corresponds an actual potentiality of piloting (PLC Inputs and Output) and a PLC memory occupation. The following table lists parameters for every unit.

CAN interfaces	Inputs + Outputs	D/A	A/D	Encoder counting	Addressing	Description
BASOCAN	0+32	1			HW: Rotary Switch (1÷15).	Node + Outputs
BASICAN	48+0		3		HW: Rotary Switch (33÷47).	Node +Inputs
BASIOCAN1 BASIOCAN2	48+32	2	6	1	HW: Microbutton (1÷63).	Node + Inputs + Outputs
BASIOCAN4	16+14	2	2	0	HW: Microbutton (1÷63).	Node + Inputs + Outputs
NOCANC	0	1	0	0	HW: Rotary Switch (1÷63). SW : Profile DSP-305(1÷63).	Node + D/A
IOCANC	16+8	0	0	0	/	Inputs/outputs
IOCANC	24+0	0	0	0	/	Inputs
ADCANC	0	0	8	0	/	A/D
CVCANC	0	0	0	3	/	Encoder counter

The available groupings for nodes are listed in the table below.

Interfaces	Max. number for node
OPIOCAN0(16 I +8 O)	3
OPIOCAN0(24 I)	2
OPADCAN0 (8 A/D)	1
OPCVCAN0 (3 counters)	3
OPIOCAN0+OPADCAN0+OPCVCAN0	3xOPIOCAN0+1xOPADCAN0+1xOPCVCAN0

For CANopen draft implementations see “CANopen specifics”.