



## CP4PWM

- New solution for management vibrating feeders
- Nuova soluzione per la gestione di canali vibranti
- Control of 4 feeders not depending from frequency and main voltage
- Controllo 4 canali indipendente dalla frequenza e dalla tensione di rete

### Load setting through PWM technology

Regolazione del carico tramite tecnologia PWM

### Adjustment during installation

Regolazione in fase di installazione

Fast self-search of the resonance frequency

Autoricerca veloce della frequenza di risonanza

Automatic calculation of the impressed voltage

Calcolo automatico della tensione impressa

### Movement dynamic regulation

Regolazione dinamica del movimento

Boost start for product release

Boost start per stacco prodotto

Soft start for silent start

Soft start per avvio senza rumori

Fast stop of the vibrator for reduction of the product queue

Arresto veloce del vibratore per riduzione coda del prodotto

### Fieldbus/Bus di campo

CANopen (DS401)

EtherCAT, Modbus (soon available)

### Programmability

Programmabilità

Stand alone with IEC61131 programmability (soon available)

Stand alone con programmabilità IEC61131 (*disponibile a breve*)





## PWM Clock frequency

30Hz up to 70Hz

## Supply Voltage

*Range della tensione di alimentazione*

110/230VAC 50/60Hz

Inrush current limitation

Limitazione della corrente di spunto

Maximum output power 600W/channel

Massima potenza di uscita 600W/canale

Maximum output power of the system 1.4kW @ 230Vac, 700 W @ 110Vac

Massima potenza di uscita del sistema 1.4kW @ 230Vac, 700W @ 110Vac

## I/O

8 digital pnp input

8 ingressi digitali pnp

8 digital pnp output 24V 500mA

8 uscite digitali pnp 24V 500mA

2 analog output 4-20mA

2 uscite analogiche 4-20mA

4 analog input 4-20mA (soon available)

4 ingressi analogici 4-20mA (disponibile a breve)

## Other Features

*Altre caratteristiche*

Fanless

Senza ventola

Electronically protected against overheating

Protetto elettronicamente da sovratemperatura

Configuration via SD Setup through USB

Configurazione tramite SD Setup via USB

## Dimensions (mm)

H 257 x W 72 x D 138

Weight (Kg) 1,7



# Peripherals

Modules & Devices



## • CANopen MODULES

### CPENCA - Axis module

device profile DS406/DS402

1 incremental encoder input

1 analog output +/- 10 Volt 12 bit + sign

6 optoisolated protected inputs 24 Vdc PNP

4 optoisolated protected outputs 24 Vdc PNP 200 mA

Power supply 24 Vdc/18Vac

### CP6V16 - 6 vibrating feeders

6 vibrators management in phase modulation modality

8 optoisolated protected inputs 24 Vdc PNP

8 optoisolated protected outputs 24 Vdc PNP 200 mA

port RS232C (optional)

2 analog outputs +/- 10 Vdc 11 bit + sign

Logic supply 24 Vdc/18Vac

Power supply 110-240 Vac 50/60Hz

### CP6TS0 - CANopen peripherals for Thermocouple

PT100-PT1000, thermoresistances sensor acquisition

Power supply: 24Vdc with polarity inversion protection

6 Thermocouple J-K

1 thermoresistance and 4 termocouples

2 thermoresistances and 2 termocouples

Resolution 16bit

### SGACQA - Load cells acquisition

nominal resolution 24 bit

unipolar input range

### CPMSG0 - CANopen Stepper motor control

Stepper motors control and load cell acquisition



## • I/O MODULES

### Compact

#### CP32D0 - Digital I/O module

Device profile DS401 version 2.0

CANopen

16 optoisolated protected inputs 24 Vdc PNP

16 optoisolated protected outputs 24 Vdc PNP 200 mA

Serial port RS232C (optional)



### LOCAL IO - Digital I/O module

#### SMI port (of FCT200/FCT300)

Version 20: 12 digital input 24V PNP / 8 digital output 24V 200 mA PNP

Version 40: 24 digital input 24V PNP / 16 digital output 24V 200 mA PNP

Version 60: 36 digital input 24V PNP/ 24 digital output 24V 200mA PNP

Version 80: 48 digital input 24V PNP / 32 digital output 24V 200 mA PNP

Version 100: 60 digital input 24V PNP/ 40 digital output 24V 200mA PNP

Version 120: 72 digital input 24V PNP/ 48 digital output 24V 200mA PNP

Version 140: 84 digital input 24V PNP/ 56 digital output 24V 200mA PNP

Version 160: 96 digital input 24V PNP/ 64 digital output 24V 200mA PNP



### Componible

#### 640-160-1AA11 and 640-185-1AA11:

EtherCAT or CANopen® bus coupler comes with 24 V power supply connector, final bus cover, base module

It is available a big variety of I/O modules for the management of analog and digital I/O, thermo-resistors, thermocouples ecc.



# Peripherals

## Ordering codes

### Modules & Devices

#### CANopen MODULES

• Order Codes: CPENCA.

a	0	Su Guida DIN con clip plastica
b	0	CMZ

• Order Codes: CP4PWM.abcd

a	0	field bus : 0=CANOpen
b	0	future options
d	0	future options
d	0	customization 0= CMZ

• Order Codes: CP6V16.

a	0	RS232 port not implemented
	1	RS232 port implemented
b	1	BC-BUS implemented
c	0	screw clamp
	1	spring clamp

• Order Codes: CP6TS0.abcd

a	0	IO Type: 0=PNP
b	0	future options
d	0	customization 0= CMZ

# Peripherals

## Ordering codes

Modules & Devices

Modules & Devices

### • Order Codes: SGACQA.a

a	0	with guide DIN support
	1	without guide DIN support

### • Order Codes: CP32D0.

a	0	RS232 port not implemented
	1	RS232 port implemented
b	0	future expansions (BC-BUS not implemented)
c	0	screw clamp
	1	spring clamp

### • Order Codes: CPMSG0.abcd

a	0	load cell connector type: 0=DSUB
b	0	load cell acquisition: 0=present
c	0	future options
d	0	customization 0= CMZ

## I/O MODULES

### • Order Codes: LOCAL IO.ab

a	b	Description
201	0	20 I/O (12IN + 8OUT)
401	0	40 I/O (24IN + 16OUT)
601	0	60 I/O (36IN + 24OUT)
801	0	80 I/O (48IN + 32OUT)
101	0	100 I/O (60IN + 40OUT)
121	0	120 I/O (72IN + 48OUT)
141	0	140 I/O (84IN + 56OUT)
161	0	160 I/O (96IN + 64OUT)



# Peripherals

## Ordering codes

### Modules & Devices

#### I/O MODULES

TYPE	DESCRIPTION
<b>Bus coupler</b>	
640-160-1AA11	TB20-C, CANopen® slave bus coupler comes with 24 V power supply connector, final bus cover, base module
640-185-1AA11	TB20-C, EtherCAT bus coupler comes with 24 V power supply connector, final bus cover, base module
<b>Digital input modules</b>	
640-210-0AB01	Digital input module – DI 2 x 24 VDC
640-210-0AD01	Digital input module – DI 4 x 24 VDC
640-210-0AH01	Digital input module – DI 8 x 24 VDC
640-210-0AP21	Digital input module – DI 16 x 24 VDC
640-210-0CC01	Digital input module – DI 3 x 24 VDC, 3-wire
640-210-0CF21	Digital input module – DI 6 x 24 VDC, 3-wire
<b>Digital output modules</b>	
640-220-0AB01	Digital output module – DO 2 x 24 VDC, 500 mA
640-220-0AD01	Digital output module – DO 4 x 24 VDC, 500 mA
640-220-0AH01	Digital output module – DO 8 x 24 VDC, 500 mA
640-220-0AP21	Digital output module – DO 16 x 24 VDC, 500 mA
640-220-7AD01	Digital output module – DO 4 x 24 VDC, 700 mA, HF
640-220-7AH01	Digital output module – DO 8 x 24 VDC, 700 mA, HF
640-220-7AP21	Digital output module – DO 16 x 24 VDC, 700 mA, HF
640-220-0BB01	Digital output module – DO 2 x 24 VDC, 2 A
640-220-0BD01	Digital output module – DO 4 x 24 VDC, 2 A
<b>Digital mix modules</b>	
640-230-0AD01	Digital mix module – DIO 2 x In/2 x Out 24 VDC, 500 mA
640-230-0AH01	Digital mix module – DIO 4 x In/4 x Out 24 VDC, 500 mA
640-230-0AP21	Digital mix module – DIO 8 x Out/8 x In 24 VDC, 500 mA
<b>Analog input modules</b>	
640-250-4AB01	Analog input module – AI 2 x I, 0/4–20 mA, ±20 mA, 12 Bit
640-250-4AD01	Analog input module – AI 4 x I, 0/4–20 mA, ±20 mA, 12 Bit
640-250-7BB01	Analog input module – AI 2 x I, 0/4–20 mA, ±20 mA, Iso., 16 Bit
640-250-7BD01	Analog input module – AI 4 x I, 0/4–20 mA, ±20 mA, Iso., 16 Bit
640-252-4AB01	Analog input module – AI 2 x U, ±10 V, 0–10 V, 1–5 V, 12 Bit
640-252-4AD01	Analog input module – AI 4 x U, ±10 V, 0–10 V, 1–5 V, 12 Bit
640-252-7BB01	Analog input module – AI 2 x U, ±10 V, 0–10 V, 1–5 V, Iso., 16 Bit
640-252-7BD01	Analog input module – AI 4 x U, ±10 V, 0–10 V, 1–5 V, Iso., 16 Bit
640-252-4CB01	Analog input module – AI 2 x U, ±24 V, 0–24 V, 12 Bit
640-252-4CD01	Analog input module – AI 4 x U, ±24 V, 0–24 V, 12 Bit
640-253-4AB01	Analog input module – AI 1/2 x R, RTD, 16 Bit, 2/3/4-wire
640-253-4AD01	Analog input module – AI 2/4 x R, RTD, 16 Bit, 2/3/4-wire
640-254-4AB02	Analog input module – AI 2 x TC, Iso., 16 Bit
640-254-4AD02	Analog input module – AI 4 x TC, Iso., 16 Bit

# Peripherals

## Ordering codes

### Modules & Devices

TYPE	DESCRIPTION
<b>Analog output modules</b>	
640-260-4AB01	Analog output module – AO 2 x I, 0/4–20 mA, 12 Bit
640-260-4AD01	Analog output module – AO 4 x I, 0/4–20 mA, 12 Bit
640-261-4AB01	Analog output module – AO 2 x U, $\pm 10$ V, 0–10 V, 1–5 V, 12 Bit
640-261-4AD01	Analog output module – AO 4 x U, $\pm 10$ V, 0–10 V, 1–5 V, 12 Bit
<b>Function modules</b>	
<b>Counters</b>	
640-300-7AA01	Function module – 1 x counter 24 V, 500 kHz, 32 Bit
640-310-7AA01	Function module – 1 x counter 5 V (RS422), 4 MHz, 32 Bit
<b>SSI Encoder Interface</b>	
640-320-7AA01	Function module – 1 x SSI encoder interface
<b>Energy Meter</b>	
640-255-7AA21	Function module – Energy meter, 1 A
640-255-7BA21	Function module – Energy meter, 5 A
<b>Communication modules</b>	
<b>Serial Interface</b>	
640-400-7AA31	Communication module – RS-232 serial interface
<b>System modules</b>	
<b>Power and Isolation Module</b>	
640-710-0AA01	System module – Power and isolation module 24 VDC, 8 A
<b>Potential distributors</b>	
640-730-4AD01	System module – Potential distributor 4 x 24 VDC, HF
640-720-0AH01	System module – Potential distributor 9 x 24 VDC
640-720-0BH01	System module – Potential distributor 9 x GND
640-720-0CH01	System module – Potential distributor 10 x AUX
640-720-0DH01	System module – Potential distributor 4 x 24 VDC + 4 x GND
640-720-0XH01	System module – Potential distributor 9 x free pot.
<b>Power module</b>	
640-700-0AA01	System module – 24 VDC power module
<b>Spare parts/Accessories</b>	
<b>Base Modules</b>	
640-900-9AA01	Base module, standard, 14 mm-width (set of five, spare part)
640-900-9AA21	Base module, 25 mm-width (set of five, spare part)
640-900-9BA01	Base module, for power and isolation module (set of five, spare part)
640-900-9CA01	Base module, for power module or bus coupler (set of five, spare part)
<b>Front connectors, Final Bus Cover, TB20 Label Package, Mini-USB Cable</b>	
640-910-9AJ01	10-terminal front connector (set of five, spare part)
640-910-9AT21	20-terminal front connector (set of five, spare part)
640-920-9AA01	Final bus cover (set of five, spare part)
640-980-9AA01	TB20 label package
700-755-8VK11	Mini-USB cable
<b>TB20 Starter Kit</b>	
640-990-STRT2	TB20 starter kit, CANopen® Slave