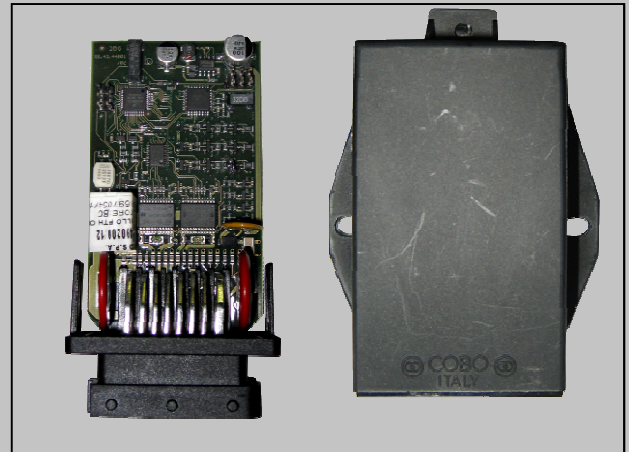


IO-EXT2: INPUT/OUTPUT MODULE WITH CAN BUS INTERFACE

CAN-BUS Input/Output extension module with multi functions input and output.
 The architecture is based on a main microcontroller together with another smaller microcontroller used as test equipment.
 This compact unit provide 14 I/O pin.
 Designed with automotive connector and IP65 housing



TECHNICAL DATA

CONTROL SYSTEM:

- 2 Freescale Microcontrollers, 8bit, 20 MHz clock,
- Flash memory 32 KB Master + 16 KB Slave
- RAM Memory 2 KB Master + 1 KB Slave
- EEPROM memory 2 KB Master

CONNECTIVITY:

- 1 CAN-BUS, CAN 2.0B (11 or 29-bit), ISO 11898-2 compliance, speed up to 1 Mbit/s,
- Termination resistor (120 Ω) available by connecting 2 pin

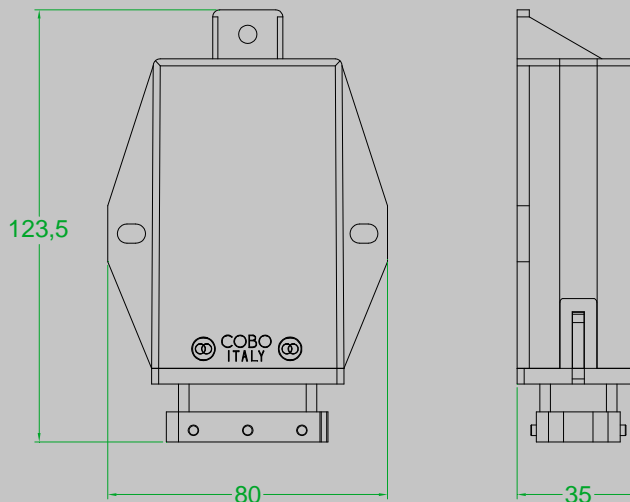
ELECTRICAL CHARACTERISTICS:

- Power Supply: 9 ÷ 30 Vdc (Operates on vehicle power supply directly)
- Current requirements for the internal logic: 50mA
- +5V Output: max. load 100mA
- Separated power supply for outputs

MECHANICAL CHARACTERISTICS AND RATINGS:

- Housing: PA6
- Dimensions: Height 123,5 mm - Width 80 mm - Depth 35mm
- Protection: IP65.
- Connector: 24 way, automotive standard with latch
- Operating Temperature Range: from -40°C to +80°C (from -40°F to +176°F)
- Storage Temperature Range: from -40°C to +85°C (from -40°F to +185°F)

MECHANICAL DIMENSIONS:



EXTERNAL CONNECTION:

PIN	Name	Description	Type	Configurations
1A	OUT7	Output 7	O	2A Output with diagnostic feedback (ON/OFF – PWM)
2A	OUT5	Output 5	O	2A Output with diagnostic feedback (ON/OFF – PWM)
3A	OUT4	Output 4	O	2A Output with diagnostic feedback (ON/OFF – PWM)
4A	OUT3	Output 3	O	2A Output with diagnostic feedback (ON/OFF - PWM)
5A	OUT2	Output 2	O	2A Output with diagnostic feedback (ON/OFF - PWM)
6A	OUT1	Output 1	O	2A Output with diagnostic feedback (ON/OFF - PWM)
7A	OUT0	Output 0	O	2A Output with diagnostic feedback (ON/OFF - PWM)
8A	+VP	Outputs Pwr Supply	E	Power supply for Outputs (8A max)
1B	GND	Logic Ground	A	Negative power supply for Logic
2B	OUT6	Output 6	O	2A Output with diagnostic feedback (ON/OFF - PWM - ANALOG)
3B	INP0	Input 2	L	12 bit analog input (0..5.5V -- 0..30V - 0..25mA) / Digital input (High-Side ON/OFF)
4B	INP2	Input 4	L	12 bit analog input (0..5.5V -- 0..30V - 0..25mA) / Digital input (High-Side ON/OFF)
5B	CA0	Input 0	L	12 bit analog input (0..5.5V -- 0..30V - 0..25mA) / Digital input (High-Side ON/OFF)
6B	CANR2			
7B	CANL	CANL	I	
8B	WDO-IN	Watchdog Input	H	5A max load
1C	+VB	Logic Power	C	Positive power supply for Logic (8..32V)
2C	5V	+5V Output	F	+5V Output (100mA max load)
3C	INP1	Input 3	L	12 bit analog input (0..5.5V -- 0..30V - 0..25mA) / Digital input (High-Side ON/OFF)
4C	INP3	Input 5	L	12 bit analog input (0..5.5V -- 0..30V - 0..25mA) / Digital input (High-Side ON/OFF)
5C	CA1	Input 1	L	12 bit analog input (0..5.5V -- 0..30V - 0..25mA) / Digital input (High-Side ON/OFF)
6C	CANH	CANH	I	
7C	CANR1			
8C	WDO-OUT	Watchdog Output	H	5A max load

I/O CONFIGURATION:

- 1 free contacts **relay** for WDO or general use

- **8 Outputs** software configurable as:

- ON/OFF High-Side

- PWM High Side open loop

Note: max. single current 2A, short circuit current 8A, max. total current 10A

- **6 Input** software configurable as:

- **On/Off Inputs** (High Side)

- **Analog Inputs** range **0 ÷ +5.5 V**, 10-bit resolution

- **Analog Inputs** range **0 ÷ +30 V**, 10-bit resolution

- **Analog Inputs** range **0 ÷ 20mA**, 10-bit resolution