

	VIA MAESTRI DEL LAVORO,30 (ZONA INDUSTRIALE) 56021 CASCINA (PI) ITALY CAPITALE SOCIALE 100.000,00 € C.F. E P.I. 01252870504	 +39 050 711131  +39 050 711472  isacsrl@isacsrl.it  http://www.isacsrl.it/
--	--	--

OPRIOBCM02

Coupler with EtherCAT Network

Reduced Data sheet

Version: 1

Date: 22.01.2026

	VIA MAESTRI DEL LAVORO,30 (ZONA INDUSTRIALE) 56021 CASCINA (PI) ITALY CAPITALE SOCIALE 100.000,00 € C.F. E P.I. 01252870504	 +39 050 711131  +39 050 711472  isacsrl@isacsrl.it  http://www.isacsrl.it/
--	--	--

Overview



The Bus Coupler Module connects the EtherCAT bus to the EtherCAT αRIO modules .

OPRIOBCM02 converts and transmits process data from the EtherCAT bus to αRIO modules via the internal bus. The αRIO modules are attached to the right side of OPRIOBCM02. OPRIOBCM02 has two RJ45 ports, ECAT In' and ECAT Out'.

The OPRIOBCM02 is connected to the EtherCAT bus via the RJ45 ECAT In' socket.

The RJ45 socket can be used to connect other EtherCAT devices.

	VIA MAESTRI DEL LAVORO,30 (ZONA INDUSTRIALE) 56021 CASCINA (PI) ITALY CAPITALE SOCIALE 100.000,00 € C.F. E P.I. 01252870504	 +39 050 711131  +39 050 711472  isacsrl@isacsrl.it  http://www.isacsrl.it/
--	--	--

Part Number

Code

Code	Description
OPRIOBCM02	EtherCAT Bus Coupler Module Enhanced (with support for gateway modules and I/O modules)

Product status

Item	Value
Status	In production: suitable for new application
In production from:	March 2019
In production at least until:	Dec 2028



VIA MAESTRI DEL
LAVORO,30
(ZONA INDUSTRIALE)
56021 CASCINA (PI)
ITALY

CAPITALE SOCIALE
100.000,00 €

C.F. E P.I. 01252870504

 +39 050 711131

 +39 050 711472

 isacsrl@isacsrl.it

 <http://www.isacsrl.it/>

	VIA MAESTRI DEL LAVORO,30 (ZONA INDUSTRIALE) 56021 CASCINA (PI) ITALY	 +39 050 711131  +39 050 711472  isacsrl@isacsrl.it  http://www.isacsrl.it/
	CAPITALE SOCIALE 100.000,00 €	
	C.F. E P.I. 01252870504	

Technical data summary

Power requirements	
Input Power	Single Voltage 24Vdc
Electrical Protection	Overload Reverse Polarity
Fieldbus	
Number of Ports	1
Protocol	EtherCAT
Bus connector	RJ45 shielded
Max cable length	100mt
Supported Services	CoE (CAN over EtherCAT), FoE (File over EtherCAT), VoE (Vendor Specific over EtherCAT) DC or Free Run
Compliant with documents	ETG.5001.1
aRIO Modules Support	
Max number	24 (Supported by protocol)
Protocol	E-BUS I-BUS (proprietary)
Power Supply	7Vdc, 24Vdc (through internal bus)
Power Supply Capabilities	1A @ 7Vdc (up to 50°C) 2A @ 7Vdc (up to 40°C) 1A @ 24Vdc [The total current absorbed by connected modules must be check]
Environment	
Operating temperature	0 ... 50 °C
Storage Temperature	-10 ... 70 °C [The environment during transportation and storage must be dry and free from dust]
Humidity	Up to 90% without condensation
Overall Dimensions	Approx. 108.5mm (H) x 23mm (W) x 80mm (D)
Weight	110 gr.
Protection Class	IP20
Mounting	Standard 35mm DIN rail
Hardware Diagnostics	
Power Supply	Blue LED
Status	Green LED
Error	Red LED
Software Diagnostic	
Power Supply	Noise detection

	VIA MAESTRI DEL LAVORO,30 (ZONA INDUSTRIALE) 56021 CASCINA (PI) ITALY CAPITALE SOCIALE 100.000,00 € C.F. E P.I. 01252870504	 +39 050 711131  +39 050 711472  isacsrl@isacsrl.it  http://www.isacsrl.it/
--	--	--

GND	Earth connection presence
Temperature	Temperature out of range detection
Voltage Supply	Low and High Voltage supply detection
I-BUS Error	I-BUS Error detection
Mounting	
	DIN rails according to EN 60715

	VIA MAESTRI DEL LAVORO,30 (ZONA INDUSTRIALE) 56021 CASCINA (PI) ITALY CAPITALE SOCIALE 100.000,00 € C.F. E P.I. 01252870504	 +39 050 711131  +39 050 711472  isacsrl@isacsrl.it  http://www.isacsrl.it/
--	--	--

Certifications

Certification	Description
CE	EU Declaration of Conformity: EMC Directive 2014/30/UE Standards used: EN 61000-6-2:2019 EN 61000-6-4:2019
UL	Compliant with UL 61010-1, UL 61010-2-210 SAFETY SU-CA: E543724
RoHS	Declaration of Conformity: RoHS Directive 2011/65/EU
Origin	Italy
CRA	Yes (pending)

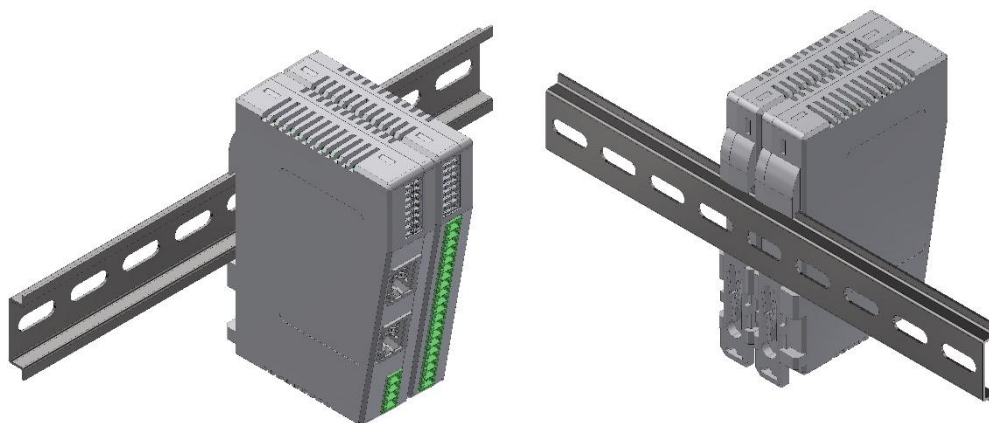
Layout and dimension

Here below are the overall dimensions and the drawing of the assembling template.

Height	108.5 mm
Width	23 mm
Depth	80 mm

Installation:

The bus coupler and bus terminals are connected to commercial mounting DIN rails according to EN 60715.



	VIA MAESTRI DEL LAVORO,30 (ZONA INDUSTRIALE) 56021 CASCINA (PI) ITALY CAPITALE SOCIALE 100.000,00 € C.F. E P.I. 01252870504	 +39 050 711131  +39 050 711472  isacsrl@isacsrl.it  http://www.isacsrl.it/
--	--	--

Reference documents

Full technical data sheet: OPRIOBCM02.