MITROL srl EtherCAT IP module

ANALOG INPUT

AI4P4CIP - Version V0

Introduction

AI4P4CIP is EtherCAT slave module with 8 analog input channels : 4 channels as potentiometers and 4 as current 0..20mA.
The leds indicate the module status and the EtherCAT connection.

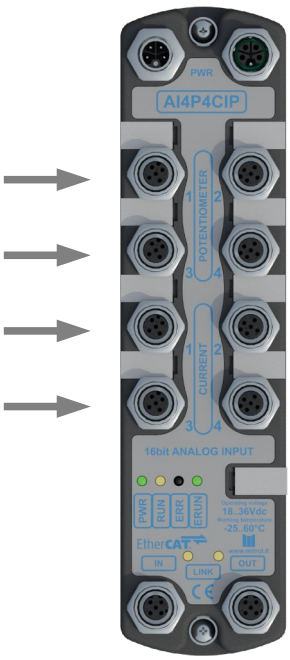
Hardware Specification

Analog Input		
Analog type	Potentiometer channel 1..4	Current channel 5..8
Analog range	0..10V	0..20mA / 4..20mA
Resolution	16 bit	
Conversion time	1ms for all inputs	
Voltage reference (10VR)	10V with protection from short circuit and over load	
R potentiometer	> 1Kohm for each channels	
Digital filter	Configurable	
Switching time	<1ms	
Common mode range	±20V (refered to internal GND analog)	
Electrical		
Supply voltage Vs/Vp	24Vdc typ (range 18..36V) Vp not used	
Electrical isolation	2500Vrms	
Power consumption from Vs	3W	
Interface	EtherCAT slave	
Specification	EN 61131-2	
Diagnostic leds	Power 🟢 Run 🟡 Error 🔴 EtherCAT run 🟡 Link IN 🟡 Link OUT 🟡	
Mechanical		
Dimensions [W x H x D]	55x213x23mm without connectors	
Installation	2 fixing holes 5mm for M4 (pitch 196mm) with metal pad to connect to Earth	
Enviroment		
Operating/storage temperature	-20..+60°C / -20..+85°C	
Relative humidity	Max 95% without condensation	
Degree of protection	IP65	

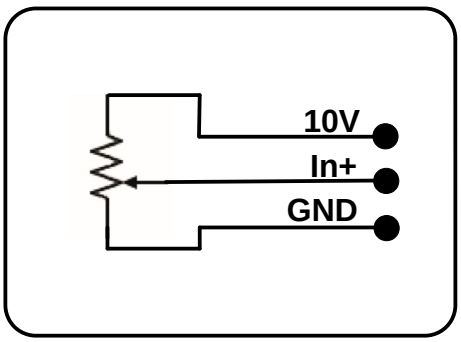
Application

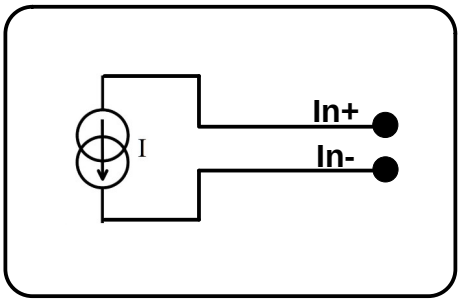
Potentiometric analog inputs

Current analog inputs



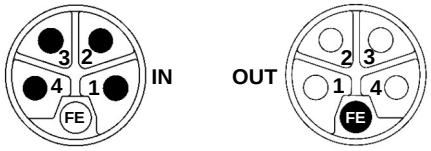
Wire Connections





Pin Assignements

Power supply
M12 L code



1 - GND Vp/Vs
2 - GND Vp/Vs
3 - 24Vs
4 - 24Vp
FE - Earth

Input as potentiometer
M12 A code

1 - 10VR
2 - In+
3 - NC
4 - GND analog
5 - NC

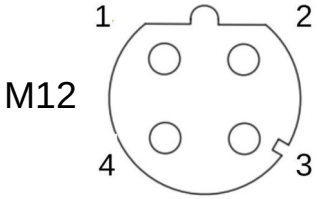
The metal bushing is connected to Earth

Input as current
M12 A code

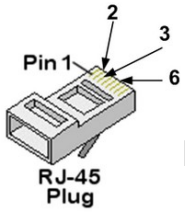
1 - NC
2 - In+
3 - In-
4 - GND analog
5 – NC

EtherCAT
M12 D code

1 - TD+
2 - RD+
3 - TD-
4 - RD-
The metal bushing is connected to Earth



1.TD+	YE - yellow	1.TX+
2.RD+	WH - white	3.RX+
3.TD-	OG - orange	2.TX-
4.RD-	BU - blue	6.RX-



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