

Basic features

Approval/Conformity	FCC Part 15 IC RSS-247 WEEE cULus EAC
Principle of operation	Processor unit
Radio license	USA Canada Mexico
Standards	EPCglobal™ Class 1, Gen 2 ISO 18000-6C

Electrical connection

Connection (COM 1)	X4 (EtherNet/IP): M12x1-Male, 4-pin, D-coded
Connection (Service)	X3 (RS232): M12x1-Male, 4-pin, A-coded
Connection (supply voltage IN)	X1: Male, 5-pin
Connection slots	1: R-TNC-Male 2: R-TNC-Male 3: R-TNC-Male 4: R-TNC-Male X2 (IN/OUT): Male, 8-pin

Display/Operation

Data rate (DR)	Green LED/Red LED
In 1	LED orange
In 2	LED orange
Module Status (MS)	Green LED/Red LED
Network Status (NS)	Green LED/Red LED
Out 1	LED orange
Out 2	LED orange
Out 3	LED orange
Out 4	LED orange
Ready/Error	Green LED/Red LED
Tag Operating	LED orange, flashing
Tag Present (TP)	LED orange

Electrical data

Antenna impedance	50 Ohm
Control input	2 (optocoupler isolated)
Control output	4 (optocoupler isolated) PNP
Control voltage active	4...40 V
Control voltage inactive	1.5...-40 V
Current consumption max. at 24 V DC	1 A
Delay time typ.	5 ms
Input current max. at 24 V	11 mA
Link/Activity (L/A)	Green LED/Red LED
Multi-Tag capable	yes
Operating voltage Ub	19.2...28.8 VDC
Operating voltage, output Vs	19.2...28.8 V DC
Output current max.	50 mA
Output power adjustable	17 dBm...30 dBm (50 mW...1 W)
Output resistance Ra	10.0 kOhm to -VS
Residual ripple max.	10 %
Working frequency	902...928 MHz

Environmental conditions

Ambient temperature	-20...55 °C
Continuous shock load	yes
EN 60068-2-27, Shock	yes
EN 60068-2-32 Free fall	yes
EN 60068-2-6, Vibration	yes
IP rating	IP65, with connector
Storage temperature	-20...60 °C

Functional safety

MTTF (40 °C)	11 a
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Interface

Interface	EtherNet/IP galvanically isolated
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Material

Housing material	Steel, Aluminum, coated
Housing material, surface protection	coated

Mechanical data

Application weight	2100.00 g
Dimension	110 x 60 x 315 mm

Remarks

For use only in USA and Canada.

When installing, the technical standards and regulations of the corresponding countries must be observed.

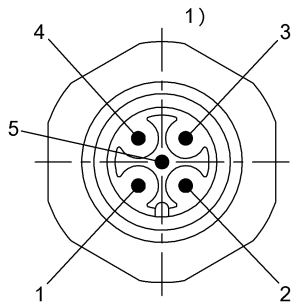
Values are under rated conditions unless otherwise specified.

Attention: Use a minimum cable length of 10 meters!

For more information about MTTF and B10d see MTTF / B10d Certificate

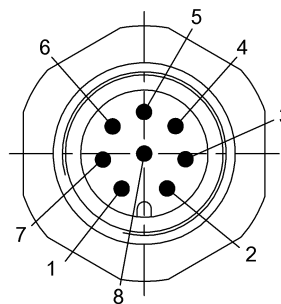
Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Connector Drawings



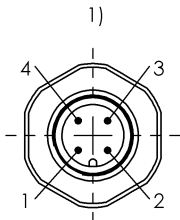
- X1**
 2)
 1 ——— +VS
 2 ———
 3 ——— -VS
 4 ———
 5 ———

- 1) View towards connector
 2) Male 5-pin/ Function



- X2**
 2)
 1 ——— OUT1
 2 ——— OUT2
 3 ——— OUT3
 4 ——— OUT4
 5 ——— +IN1
 6 ——— +Vs
 7 ——— -Vs
 8 ——— +IN2

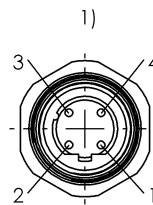
- 1) View towards connector
 2) Male 8-pin/ Function



X3
 2)
 3)

Pin	Function
1	n.c.
2	TxD
3	GND
4	RxD

- 1) View towards connector
 2) Service port RS232
 3) Male 4-pin/ Function



X4
 2)
 3)

Pin	Function
1	TD+
2	RD+
3	TD-
4	RD-

- 1) View towards connector
 2) Ethernet IP
 3) Male 4-pin/ Function