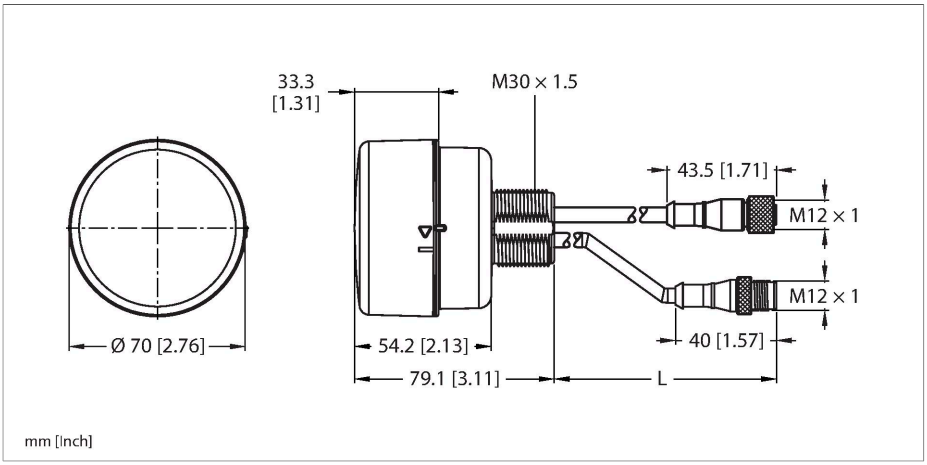
R70ER2MQ
Radio Transmission System – Serial Data Transmission Serial Radio



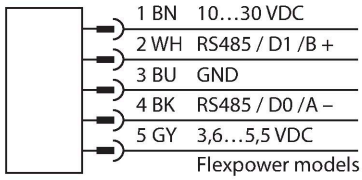
Technical data

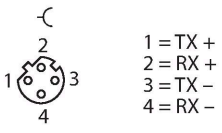
Type	R70ER2MQ
ID	3813378
Wireless data	
Type of radio	short-range
Installation	stationary
Topology	Tree topology Star topology Point-to-point with repeater Point-to-point
Function	Tree topology
Device type	Node
Frequency band	2.4-GHz ISM band
Frequency range	2.402…2.483 GHz
Number of radio channels	50
Channel width	1 MHz
Spread spectrum technology	FHSS (Frequency Hopping Spread Spectrum)
Single-Carrier Residence Time	7.8 ms
Output power ERP	18 dB/65 mW
Output power EIRP	20 dB/100 mW
Range	1000000 mm
I/O data	
Communication protocol	EtherNet/IP Modbus TCP PROFINET
Electrical data	
Runs with battery	No

Features

- Protection class IP65
- M30 × 1 mech. screw-in thread
- Connection via cable with male connector, M12 × 1, 5-pin and cable and male connector, M12 × 1, 5-pin, D-coded
- Radio range of 1 km
- Max. package size of 1500 bytes
- Transfer rate of 250 kbps
- RS485 interface: Half-duplex, 9.6 kBd/19.2 kBd, 8 data bits, 1 stop bit, parity none
- Operating voltage: 10…30 VDC

Wiring diagram





Functional principle

R70 Ethernet radios transmit standard Ethernet protocols over distances of up to 1 km. The following topology options can be selected: point-to-point, star or tree. Each network consists of a master and at least one slave. Repeaters extend the radio range. The device type is determined via internal DIP

Technical data

Operating voltage U_B	10…30 VDC
DC rated operating current I_e	≤ 20 mA
Power-on indication	LED, Green
Mechanical data	
Design	Rectangular, R70ER
Dimensions	Ø 70 x 87.1 mm
Housing material	Plastic, PC, Black
Electrical connection	Cable with connector, M12 × 1
Antenna connection	Internal (wire loop)
Ambient temperature	-40…+85 °C
Relative humidity	0…95 %
Protection class	IP65
Tests/approvals	
Approvals	CE CSA ATEX

switches. There is no software required to connect and adjust the devices.
Directives:
FCC ID: UESX243 This device complies with FCC para. 15, subpara. C, 15.247:
IC: 7044A-SX243
ETSI/EN: In compliance with EN 300 328: V1.8.1
IC: 7044A-DX8024
Radiation protection 10 V/m for 80…2700 MHz acc. to EN 61000-6-2
Shock and vibration resistance: IEC 68-2-6 and IEC 68-2-7