

TURCK

Your Global Automation Partner

Q150 UHF RFID Read/Write Head



All-in-one read/write head with Ethernet interface

The TURCK Q150 UHF RFID read/write heads are an all-in-one solution that integrates directly into your industrial Ethernet network, including Profinet, EtherNet/IP, Modbus TCP, or EtherCAT without requiring an external interface module. Built tough with an IP67 rating, its compact 150 mm housing fits into tight manufacturing spaces. The switchable internal antenna eliminates tag blind spots for flawless data capture. Ideal for tracking work-in-progress or item identification, the Q150 delivers flexible, high-performance asset visibility right to your PLC.

The variants available include multiprotocol Ethernet or EtherCAT. Integration with webserver or PLC mapping provides flexibility. No intermediate CODESYS program required.

Ideal for applications where RFID data is going back to a PLC instead of integrating directly to a higher-level system such as a WMS or ERP. Use cases include production lines, conveyor belt monitoring, RTI tracking and reliable inventory control in intralogistics and the automotive industry. Support for ARGEE V3 software programming environment is available.

Your benefits

- Its compact design, external antenna support & powerful performance is unique in the industry
- "All-in-one" design that integrates the interface with the reader, simplifying setup
- Easy configuration & troubleshooting using the TURCK Automation Suite (TAS)
- Includes an internal antenna with switchable polarization (RHCP and LHCP) & an external antenna port that works with all existing TURCK UHF antennas

Technical Data

General data

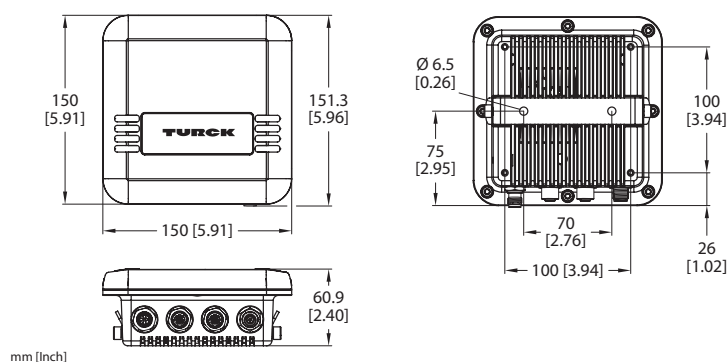
Technology	UHF RFID
Region (UHF)	USA, Canada, Mexico (902...928 MHz)
Radio Communication and Protocol Standards	ISO 18000-63, EPCglobal Gen 2
Data Transfer	Alternating electromagnetic field
Approvals	UL, FCC, IC, IFT

Electrical data

Type Code	TN-UHF-Q150-NA-EN	TN-UHF-Q150-NA-EC
Fieldbus Protocol	Ethernet/IP, PROFINET, Modbus TCP	CAN over EtherCAT
Operating Voltage	12...30 VDC	12...30 VDC
DC Rated Operational Current	<1200 mA	<1200 mA
Channel Spacing	500 kHz	500 kHz
Output Power	≤ 0.5 W (ERP), adjustable	≤ 0.5 W (ERP), adjustable
Antenna Polarization	RHCP/LHCP, adjustable	RHCP/LHCP, adjustable
Antenna HPBW	90 degrees	90 degrees
Transmission Rate, Ethernet	10/100 Mbps	10/100 Mbps
Web Server	Default: 192.168.1.254	Default: 192.168.1.254

Mechanical data

Type Code	TN-UHF-Q150-NA-EN	TN-UHF-Q150-NA-EC
Mounting Conditions	Non-flush	Non-flush
Ambient Temperature	-30...+50 °C	-30...+50 °C
Design	Rectangular	Rectangular
Dimensions	150 x 150 x 61.7 mm	150 x 150 x 61.7 mm
Housing Material	Aluminium, AL, Silver	Aluminium, AL, Silver
Active Area Material	Glass fiber-reinforced polyamide, PA6-GF30, black	Glass fiber-reinforced polyamide, PA6-GF30, black
Vibration Resistance	55 Hz (1 mm)	55 Hz (1 mm)
Shock Resistance	30 G (11 ms)	30 G (11 ms)
Protection Class	IP67	IP67
Antenna Connection	RP-TNC	RP-TNC
Electrical Connection	M12, 5-pin	M12, 5-pin
Connection Technology, Ethernet	2 x M12, 4-pin, D-coded	2 x M12, 4-pin, D-coded



mm [Inch]

Part number selection

ID Number	Part Number	Communication Protocol
100018055	TN-UHF-Q150-NA-EN	Ethernet/IP device, PROFINET device, or Modbus TCP server
100018056	TN-UHF-Q150-NA-EC	EtherCAT server according to Modular Device Profile (ETG.5001.1)