

TN902-Q175L200-H1147 UHF Read/Write Device



Technical data

Туре	TN902-Q175L200-H1147	
ID	7030457	
Approvals	cULus	
Electrical data		
Operating voltage	1224 VDC	
DC rated operational current	≤ 1000 mA	
Data transfer	Alternating electromagnetic field	
Technology	UHF RFID	
Region (UHF)	USA, Canada, Mexico (902…928 MHz)	
Radio communication and protocol stan- dards	ISO 18000-63 EPCglobal Gen 2	
Channel spacing	500 kHz	
Output power	1 W (ERP), adjustable	
Antenna polarization	RHCP	
Antenna HPBW	90°	
Output function	4-wire, Read/Write	
Mechanical data		
Mounting conditions	Non-flush	
Ambient temperature	-20+50 °C	
Design	Rectangular	
Dimensions	200 x 175 x 60 mm	
Housing material	Aluminium, AL, Silver	
Active area material	Plastic, ABS, black	
Vibration resistance	55 Hz (1 mm)	
Shock resistance	30 g (11 ms)	
Protection class	IP67	
Electrical connection	M12 × 1	



Features

Rectangular, height 60 mm

Active face in front

Plastic, ABS

Device only suitable for operation in North America (NA) at 902...928 MHz (USA, Canada, Mexico)

.../S2503 Connectors

1 RD	+
3 BK	-
4 WH	Data
_2 BU	Data

.../S2500 Connectors

 1 BN	+
3 BU	-
4 WH	Data
2 BK	Data

.../S2501 Connectors

 1 BN	+
3 BU	_
4 BK	Data
<u>2 WH</u>	Data
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Functional principle

The UHF read/write heads form a transmission zone, the size of which may vary depending on the combination of read/write head and tag used.



Technical data

MTTF	51 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED, Green/Yellow/Red
Diagnostic display	different settings
Packaging unit	1

The read/write distances only represent standard values measured under laboratory conditions, free from any influences caused by surrounding materials.

Attainable distances may vary due to component tolerances, mounting conditions, ambient conditions and material qualities, especially when mounted in metal. Testing of the application under real operating conditions is therefore essential, especially with on-the-fly reading and writing! Due to the higher energy needs of the transponder for a write operation, the range is reduced to approximately 40–60 % of the reading range.

Accessories

RH-Q240L280/Q280L640



7030296 Arm bracket for UHF RFID read/write heads TNxxx-Q175L200-H1147, TNxxx-Q240L280-H1147 and TNxxx-

Q280L640-H1147

Accessories

Dimension drawing	Туре	ID	
M12 x1 0 15 42	RK4.5T-2-RS4.5T/S2500	6699200	BL ident cable, M12 female connector, straight to M12 male connector, straight, cable length: 2 m, jacket material: PUR, yellow; other cable lengths and qualities available, see www.turck.com
M12 x1 2 14 0 15 14 52,3 - 45,4 - 4	RSCV-RKCV5500-2M/S2500	6633193	Cable for RFID applications in the food industry, M12 connector, straight to M12 female connector, straight, cable length: 2 m, jacket material: PPEDEM, white; other cable lengths and qualities available, see www.turck.com