TN865-Q120L130-H1147
UHF Read/Write Device
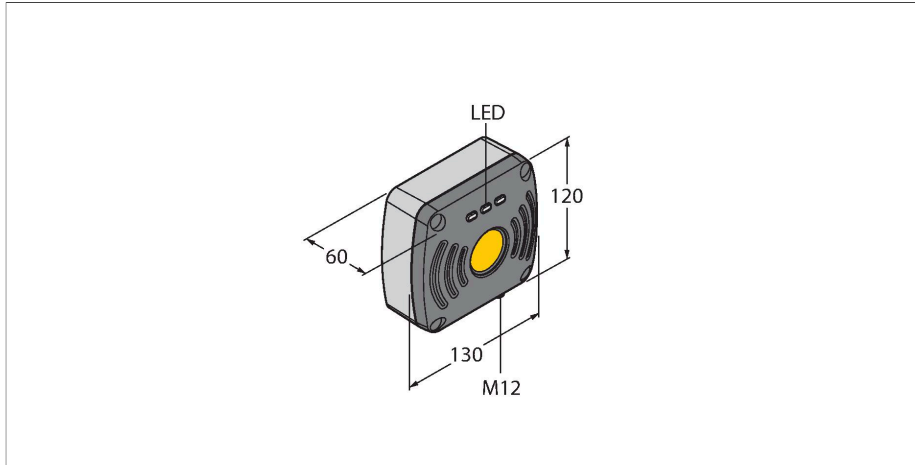
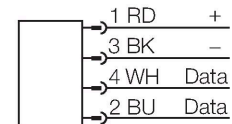

Technical data

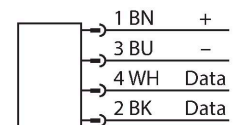| Type	TN865-Q120L130-H1147
ID	7030520
Approvals	CE
Electrical data	
Operating voltage	12…24 VDC
DC rated operational current	≤ 1000 mA
Data transfer	Alternating electromagnetic field
Technology	UHF RFID
Region (UHF)	Europe, India, Turkey, South Africa (865…868 MHz)
Radio communication and protocol standards	ISO 18000-63 EPCglobal Gen 2
Channel spacing	200 kHz
Output power	≤ 0.5 W (ERP), adjustable
Antenna polarization	RHCP
Antenna HPBW	110°
Output function	4-wire, Read/Write
Mechanical data	
Mounting conditions	Non-flush
Ambient temperature	-20…+50 °C
Design	Rectangular
Dimensions	130 x 120 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
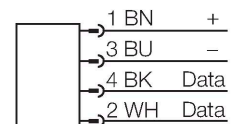- Device only suitable for operation within the European Union (EU) at 865…868 MHz

…/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
2 WH	Data

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.
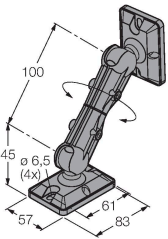
Technical data

MTTF	51 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	LED, Green
Diagnostic display	differently adjustable
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	Type	ID	
	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
	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