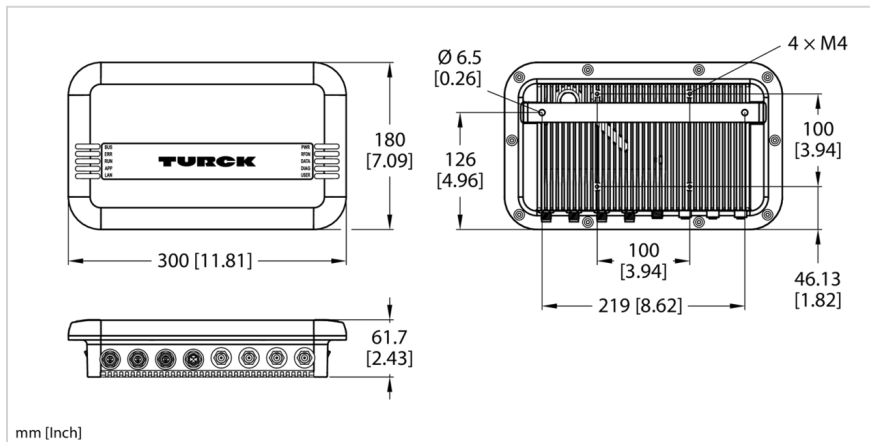


TN-UHF-Q180L300-KOR-LNX

UHF reader



Type designation	TN-UHF-Q180L300-KOR-LNX
Ident-No.	100000944

Technical data

Power supply	
Operating voltage U_B	18...30 VDC
Electrical data	
Output function	Read/Write
Channel spacing	200 kHz
Data transfer	Alternating electromagnetic field
DC rated operational current	≤ 3500 mA
Output power	Conducted power: ≤ 30 dBm, adjustable
Region (UHF)	Korea (917...920.8 MHz)
Technology	UHF RFID
Controller	
Processor	ARM Cortex A8, 32 Bit, 800 MHz
Memory	512 MB Flash
RAM memory	512 MB DDR3
Interfaces	
Network protocol	TCP/IP, REST API
Power over Ethernet	
PoE standard	IEEE 802.3at (PoE+)
System data	

Features

- REST API interface: RFID-U interface
- Freely programmable Ethernet-based reader based on Linux
- Programming language C, C++, NodeJS, Python
- Software components: SSH, SFTP, HTTP, IBTP, MTXP, DHCP, SNTP, Node.js 6.9.5 (LTS), Python 3.x
- 4 RP-TNC connections for passive, external UHF antennas
- 4 digital channels, configurable as PNP inputs and/or 0.5-A outputs
- 10 Mbps/100 Mbps transmission rate
- Integrated web server with reader parameterization
- Web-based UHF RFID test tool for easy air interface evaluation
- LEDs and diagnostics
- Device only suitable for operation in Korea (KOR) at 917...920 MHz

Functional principle

The UHF readers form a transmission zone, the size of which may vary depending on the combination of reader and tag used. The achievable distances may be different due to component tolerances, mounting location in the application, ambient

Technical data

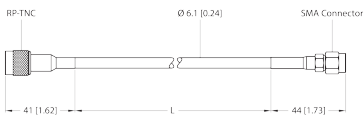
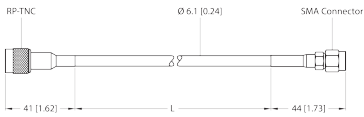
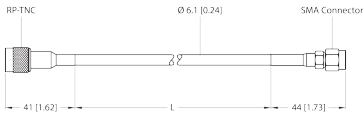
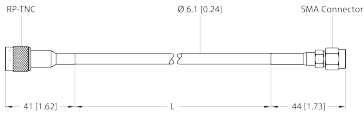
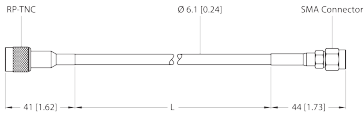
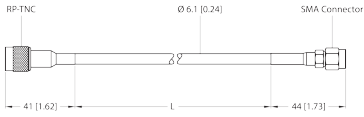
Transmission rate Ethernet	10/100 Mbps
Connection technology Ethernet	1 x M12, 4-pin, D-coded
Digital inputs	
Number of channels	4
Connectivity inputs	M12, 5-pin
Input type	PNP
Type of input diagnostics	Channel diagnostics
Switching threshold	EN 61131-2 Type 3, PNP
Low-level signal voltage	< 5 V
High level signal voltage	> 11 V
Low level signal current	< 1.5 mA
High level signal current	> 2 mA
Digital outputs	
Number of channels	4
Connectivity outputs	M12, 5-pin
Output type	PNP
Type of output diagnostics	Channel diagnostics
Mechanical data	
Design	Rectangular
Construction type designation	Q180L300
Dimensions	300 mm x 180 mm x 61,7 mm
Housing material	Aluminium, AL, Silver
Active area material	Glass fiber-reinforced polyamide, PA6-GF30, black
Electrical connection	RP-TNC
Input impedance	50 Ohm
Mounting conditions	Non-flush
Ambient conditions	
Ambient temperature	-20...+50 °C
Shock test	acc. to EN 60068-2-27
Shock resistance	30 g (11 ms)
Vibration resistance	55 Hz (1 mm)
Vibration test	Acc. to EN 60068-2-6, acceleration up to 20 g
Protection class	IP67
Tests/approvals	
Approvals	KCC

conditions and the effect of materials (particularly metal).
 Testing of the application under real operating conditions is therefore essential, especially with on-the-fly reading and writing!

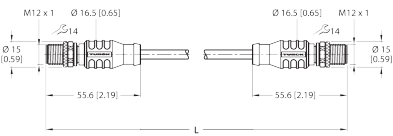
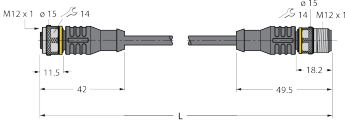
Technical data

MTTF	49 Years acc. to SN 29500 (Ed. 99) 20 °C
Comments	
Packaging unit	1

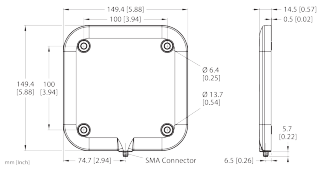
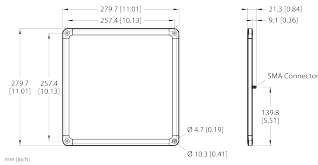
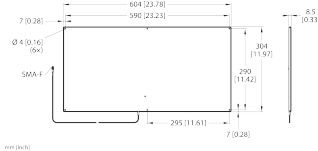
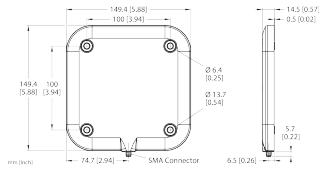
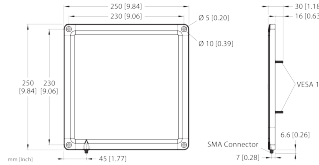
Connection accessories

TN-UHF-CBL-HF240-RPTNC-1-SMA	100028191
HF240 coaxial cable, length 1 m	
	
TN-UHF-CBL-HF240-RPTNC-2-SMA	100028192
HF240 coaxial cable, length 2 m	
	
TN-UHF-CBL-HF240-RPTNC-4-SMA	100028193
HF240 coaxial cable, length 4 m	
	
TN-UHF-CBL-HF240-RPTNC-6-SMA	100028194
HF240 coaxial cable, length 6 m	
	
TN-UHF-CBL-HF240-RPTNC-8-SMA	100028195
HF240 coaxial cable, length 8 m	
	
TN-UHF-CBL-HF240-RPTNC-10-SMA	100028196
HF240 coaxial cable, length 10 m	
	
TN-UHF-CBL-HF240-RPTNC-12-SMA	100028197

Connection accessories

		HF240 coaxial cable, length 12 m
RSSD-RSSD-4422-2M	6635150	Cable for Industrial Ethernet, M12 male connector, D-coded, straight to M12 male connector, D-coded, straight, cable length: 2 m, jacket material: PUR, green
		
RKC5T-2-RSC5T/TXL	6625616	Extension cable, M12 female connector to M12 male connector, straight, 4-pin + PE, cable length: 2 m, jacket material: PUR, black; cULus approval
		

Functional accessories

TN-UHF-ANT-Q150-FCC	100028596	Passive UHF RFID antenna, dimensions 150 × 150 mm
		
TN-UHF-ANT-Q280-FCC	100028602	Passive UHF RFID antenna with integrated VESA100 pins, dimensions 280 × 280 mm
		
TN-UHF-ANT-Q300L600-FCC	100047593	
		
TN-UHF-ANT-NF-Q150-ETSI-FCC	100028594	Passive UHF RFID near-field antenna, dimensions 150 × 150 mm
		
TN-UHF-ANT-Q250-FCC	100028600	Passive UHF RFID antenna, dimensions 250 × 250 mm
		
TN-UHF-ANT-Q150-MR-FCC	100047589	
