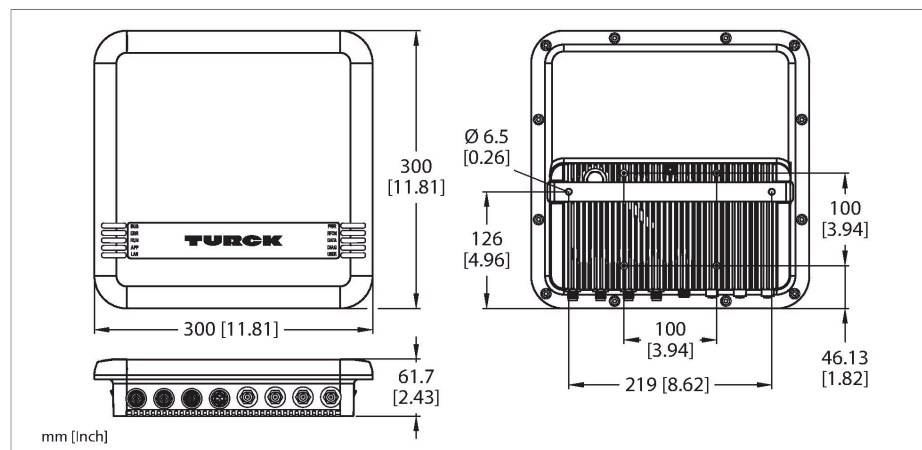


TN-UHF-Q300-NA-LNX

UHF Reader



Technical data

Type	TN-UHF-Q300-NA-LNX
ID	100000902
Approvals	UL FCC IC IFETEL
Electrical data	
Operating voltage	18...30 VDC
DC rated operational current	≤ 3500 mA
PoE standard	IEEE 802.3at (PoE+)
Data transfer	Alternating electromagnetic field
Technology	UHF RFID
Region (UHF)	USA, Canada, Mexico (902...928 MHz)
Radio communication and protocol standards	ISO 18000-63 EPCglobal Gen 2
Channel spacing	500 kHz
Output power	≤ 36 dBm (EIRP), adjustable
Antenna polarization	circular/linear, adjustable
Antenna HPBW	65°
Output function	Read/Write
Mechanical data	
Mounting conditions	Non-flush
Ambient temperature	-20...+50 °C
Design	Rectangular
Dimensions	300 x 300 x 61.7 mm
Housing material	Aluminium, AL, Silver



Features

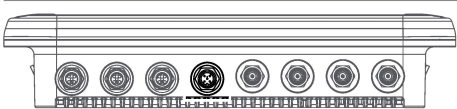
- TCP/IP
- Freely programmable Ethernet-based read/write head based on Linux
- Programming language C, C++, NodeJS, Python
- Software components: SSH, SFTP, HTTP, IBTP, MTXP, DHCP, SNTP, Node.js 6.9.5 (LTS), Python 3.x
- Implementation of the protocol is required
- 4 RP-TNC connections for passive, external UHF antennas
- 4 digital channels, configurable as PNP inputs and/or 0.5 A outputs
- 10 Mbps/100 Mbps transfer rate
- Integrated web server
- LED displays and diagnostics
- Device only suitable for operation in North America (NA) at 902...928 MHz (USA, Canada, Mexico)

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 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!

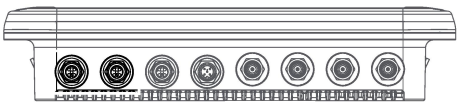
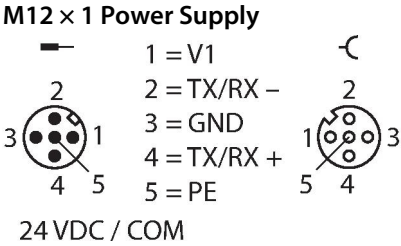
Technical data

Active area material	Glass fiber-reinforced polyamide, PA6-GF30, black
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
Electrical connection	RP-TNC
Input impedance	50 Ohm
MTTF	49 years acc. to SN 29500 (Ed. 99) 20 °C
System description	
Processor	ARM Cortex A8, 32 Bit, 800 MHz
Memory	512 MB Flash
RAM memory	512 MB DDR3
System 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
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
Type of input diagnostics	Channel diagnostics
Digital outputs	
Number of channels	4
Connectivity outputs	M12, 5-pin
Output type	PNP
Type of output diagnostics	Channel diagnostics
General Information	
Packaging unit	1

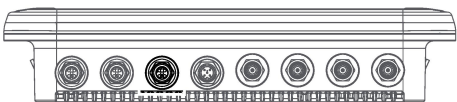
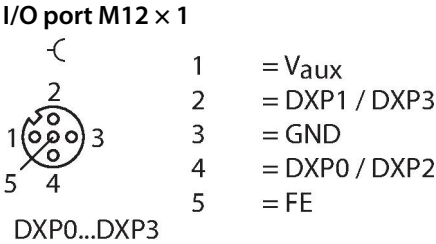


Accessories
Power supply cordset (example):
EKRT-ESRT-A4.220-GC0K-2
Ident no. 100040033

Power supply + BL ident communication
cordset (example):
RK 4.5T-2-RS 4.5T/S2501
Ident no. U3-01243



Accessories
Accessories:
Connection cable , 2-channel (example):
RK 4.4T-2-RS 4.4T
Ident no. U2445
Splitter, 1-channel (example):
YB2-FSM 4.5-2FKM 4.5
Ident no. U0875-78



Accessories
Ethernet cable (example):
RSSD RSSD 441-2M
Ident no. U-02482

