TAARA – WOC TERMINAL MODEL V1.1 – DATASHEET

Taara

Wireless Optical Communication

DATA SHEET
WOC Terminal
Model v1.1

EXTENDING HIGH-SPEED BROADBAND CONNECTIVITY

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WOC Terminal Model v1.1

Wireless Optical Communication

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WOC

Taara uses Wireless Optical Communication (WOC), a line-of-sight technology, to transmit video, voice and data at high speeds of up to 20 Gbps. A single link can cover distances up to 20 km. The effective range may be increased by relaying links. Taara's wireless links can be used to provide fiber backhaul, rapidly extend existing architecture, and create local area networks.
Key advantages include:

No right of way permits: Does not require right of way permits or spectrum licenses. Data is transmitted using eye-safe lasers in the unregulated infrared band (193 THz).

Quick deployment: Can be installed and uninstalled in less than a day. Terminals are easy to transport and require limited support equipment (each terminal weighs 13kg and may be placed on poles, towers or tripod stands).

Connectivity across difficult terrains: Particularly effective in areas that are difficult to connect using fiber cables. These include sites located around forested regions, water bodies, railway tracks or land with high real estate costs.

Cost competitive: Provides significantly favorable economics on a cost per GB/km model compared to traditional alternatives.

Easy to integrate: Based on open standards to work with existing infrastructure/environments.

For further information, please contact **taarateam@x.team**
For media inquiries, please contact **press@x.team**
Details at **x.company/taara**

TERMINAL SPECIFICATIONS

Parameter	Value
Throughput	20 Gbps full-duplex
Range	400 m to 20 km
Latency	Minimum latency (processing delay) < 160 µs Mean latency < 5 ms
Dimensions	220 mm x 240 mm x 750 mm (without sun shade)
Weight	13 kg
Regulatory compliance	IEC 62368-1, 60950-22, FCC 15.b, EN 300 386

POWER SPECIFICATIONS

Parameter	Value
Power consumption	40 W typical; 60 W maximum
Power connections	± 38 to ± 58 V ± 48 V DC (nominal) or PoE++ (UPoE)
Maximum current drawn	1.25 A

ENVIRONMENTAL SPECIFICATIONS

** Terminal can operate at up to 65° solar loading*

Parameter	Value
Operating temperature range (ambient)	–20 to 55°C *
Storage temperature range (ambient)	–40 to 85°C
Relative humidity	5 – 100 %
Enclosure rating	IP 65

LINE-OF-SIGHT SPECIFICATIONS

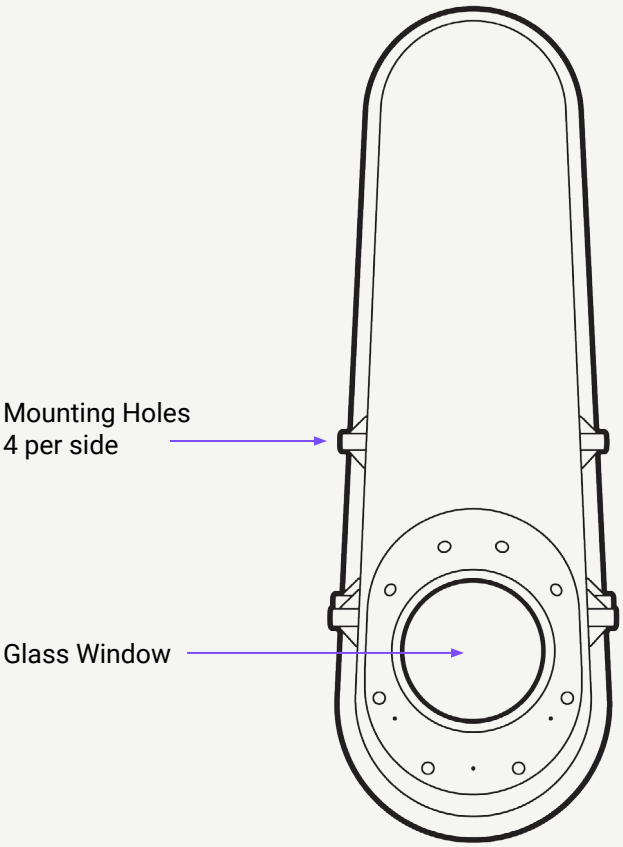
Parameter	Value
Allowable tower twist/sway	± 3 degrees
Alignment	Automated search and acquisition
Mounting bracket weight	3.7 kg
Mounting bracket dimensions	0.25 m x 0.2 m x 0.18 m
Mounting pole diameter	63.5 mm - 101.6 mm

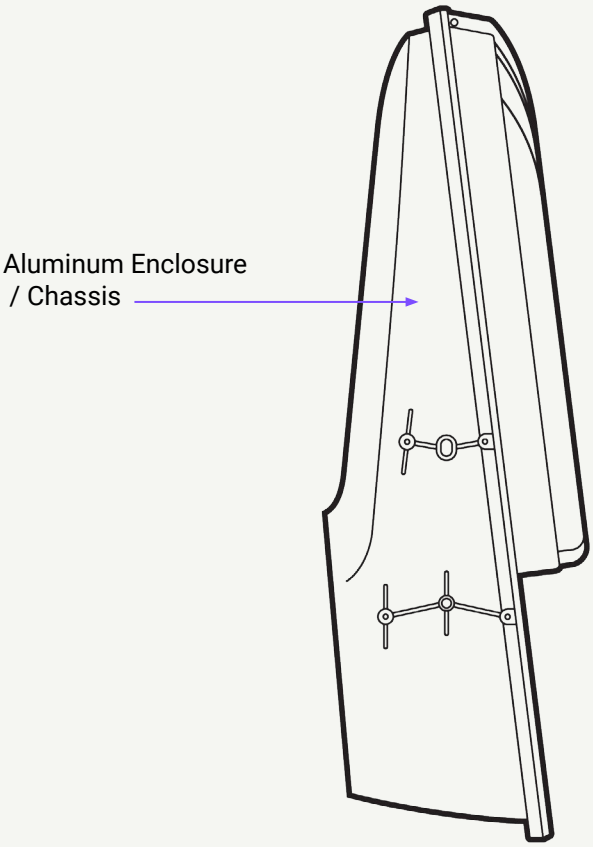
LASER SPECIFICATIONS

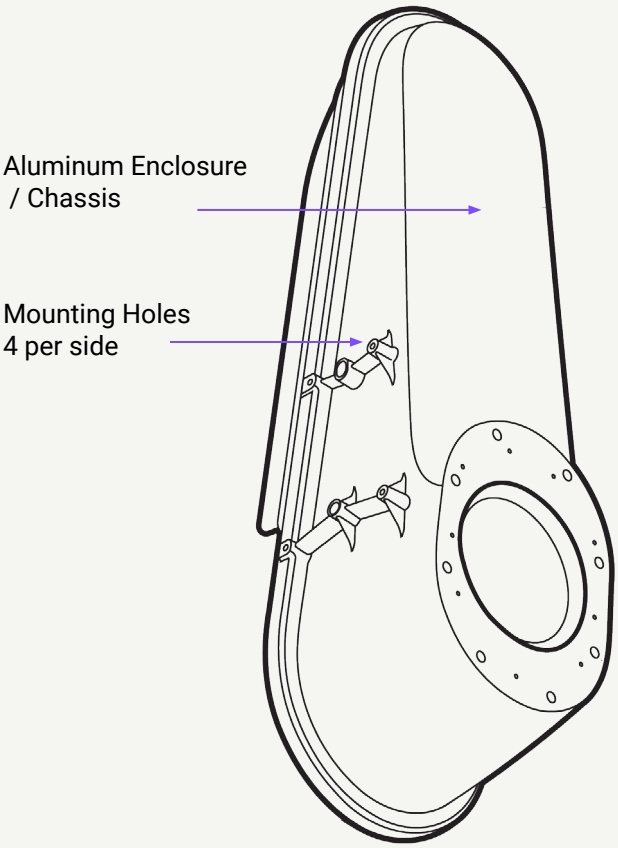
Parameter	Value
Classification	Class 1M (eye safe)
Maximum output power	25 dBm 30 dBm for 0.5.1 or higher version software
Wavelength range	1535 - 1565 nm
Regulatory compliance	IEC 60825-1, 60825-12, 21CFR Part 1040

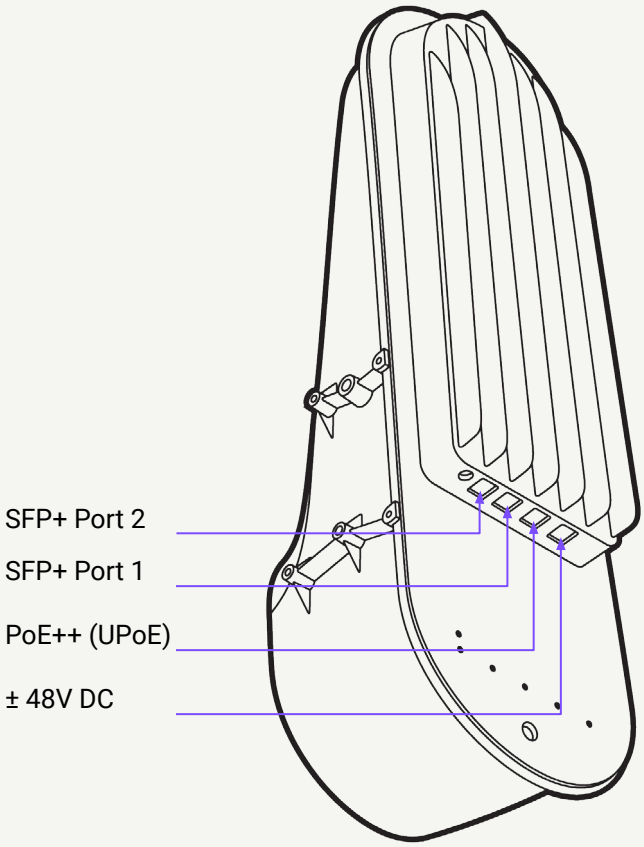
INTERFACE SPECIFICATIONS

Parameter	Value
Network connections	Two 10 GbE optical SFP+ ports (data) One 1G RJ-45 Ethernet port (management)
Supported SFP+ types	10 GBASE-SR, 10 GBASE-SRL, 10 GBASE-LR, 10 GBASE-LRM, 10 GBASE-ER, 10 GBASE-ZR
Equipment management system	SNMP v3 IETF RFC 3413 customized management information base compatible with commercial SNMP software
Supported data protocol	IEEE 802.3 10 GbE (including jumbo ethernet frames)
Performance monitoring	1 Hz telemetry including: Transmit and received power System reset/alarm flags Throughput (bps) Latency Pointing system statistics


Mounting Holes
4 per side
Glass Window


Aluminum Enclosure
/ Chassis


Aluminum Enclosure
/ Chassis
Mounting Holes
4 per side


SFP+ Port 2
SFP+ Port 1
PoE++ (UPoE)
± 48V DC

About Digicomm International

Digicomm International is a global leader in providing cutting-edge telecommunications equipment that drive innovation and efficiency in broadband networks. Since 1993, we have partnered with our customers to meet the ever-evolving demands of network operations, with a steadfast commitment to 100% customer satisfaction.

With a state-of-the-art distribution center in Englewood, CO, housing over 400,000 sq. ft. of inventory across 55,000 part numbers, we ensure rapid, efficient shipping—*often on the same day*—while maintaining the highest standards of quality control. Our centralized distribution minimizes shipments and maximizes efficiency, allowing us to meet the operational needs of our customers with precision and reliability.

Engineering Services

Digicomm's team of system and network consulting engineers are industry veterans that have worked with analog and digital transport systems for decades. Our engineering team collaborates closely with our customers to create solutions that meet their unique challenges in a way that maximizes performance while maintaining cost efficiency and unparalleled reliability. Our engineering team provides the following services to the industry:

- Pre-Project Consultation
- Network Design
- Installation and Activation Support
- Training
- Technical Support
- Speaking / Training at Industry Conferences

Digicomm, an industry leader in VMI

The power of Digicomm's VMI lies in its ability to unite data, creating an unmatched ability to predict your needs. Our proprietary VMI system includes custom key performance indicators (KPIs), providing businesses with measurable metrics to evaluate and continuously improve their supply chain performance. Your supply is rigorously analyzed each day, ensuring that optimal stock levels and efficiencies are maintained to deliver unparalleled supply chain management solutions. This strategic advantage translates to quick deployments, fostering loyalty and trust among your customers. Our commitment to customer service excellence ensures that you can trust us to manage your inventory efficiently, allowing you to focus on what you do best.

Streamlined Deployments with Digicomm's Kitting Services

Digicomm's kitting services streamline network deployments by bundling all necessary components for a task into a single, ready-to-use kit, eliminating the hassle of sorting and organizing materials on-site. This approach enhances efficiency, reduces errors, and ensures inventory control by consolidating components up front, allowing technicians to focus on rapid, precise installations.