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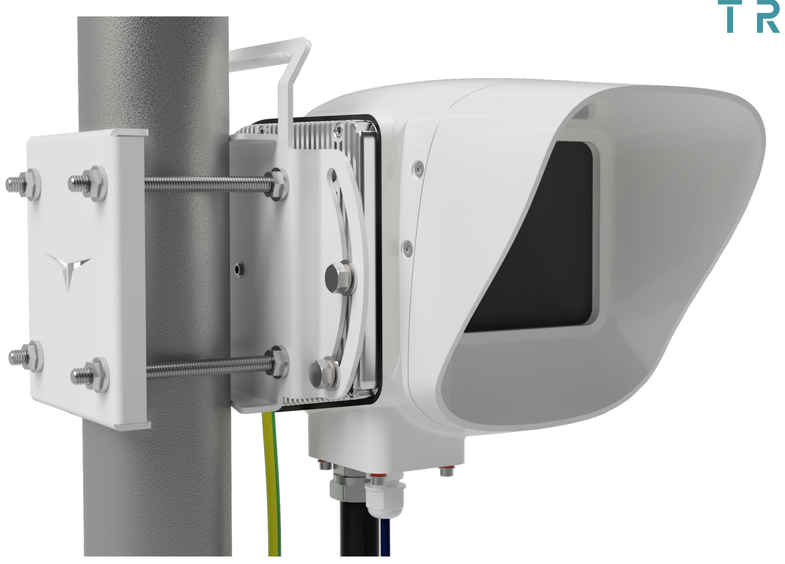

CENTAURI

WIRELESS LASER COMMUNICATIONS

SPEED TO MARKET

No Right of Way Needed.
Rapid Deployment Time.
No Trenching and Digging.

HIGHEST BANDWIDTH

Fibre Alternative or
Microwave Replacement.
Line Rate Throughput Scaling Up
To 100Gbps In Future

LOWEST TCO

ZERO Spectrum Costs.
ZERO Fibre Laying Costs.
Opex Pricing Options.

INDUSTRIES AND USE CASES

TELCO

Enhance and expand services, supporting 4G/5G backhaul and fronthaul, and last-mile connectivity to new and underserved communiities.

ISP

Accelerate capacity expansion, enable new market entry, and reduce the time it takes to move from “signup” to “revenue” from new subscribers.

LARGE CAMPUS

Fast and easy deployment for campus-wide connectivity. Expand network capacity to support high-volume data flows and support mission-critical applications in record time.

DEFENCE

Deploy 10Gbps line-of-sight links in a matter of hours. Inherently secure and jam-proof communications in a lightweight, low-power design for mobile deployments.

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COMMUNICATION SYSTEM

Models	CENTAURI 1G	CENTAURI 10G
Max. Throughput	1 Gbps Full Duplex	10 Gbps Full Duplex
Data Interface	SFP	SFP+
Typical RTD at 3km	< 25 µs	
Operating Range	200m to 3km+ 99% to 99.999% dep. on Rain Zone	
Wavelength	1550nm	
Automatic Power Control	Up to 23dBm/199mW	
Automated Pointing & Tracking	Proprietary Realtime Laser Stabilization Range: Horizontal: ± 2º, Vertical:± 2º	
Management Interface	100 BASE-T (RJ-45)	
Network Monitoring & Configuration	- Outband - Transcelestial NMS - SNMP (v3)	
Installation Environment	Intended for Outdoor Use	
Communication Protocol	OSI Layer 1 (PHY)	
Synchronisation	Pass-Through Bridge	

COMPLIANCE & SAFETY

General Safety	IEC 62368-1:2014+A11:2017
Laser Safety	Optical interface: Class 1/1M SFP/SFP+ IEC/EN 60825-1
EMI/EMC Interference	FCC 15B, EN55011, EN 55032/35/24
Quality Standards	ISO 9001, ISO 14001
	This product complies with 21 CFR 1040.10 and 1040.11 except for conformance with IEC 60825-1 Ed 3., as described in Laser Notice No. 56, dated May 8, 2019.

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PHYSICAL SPECIFICATIONS

Dimensions	32 (L) x 18 (W) x 20(H) cm
Device Weight	2.7kg
Mount Weight	1.1kg
Power Rating	48V DC / 56V PoE DC 60W 2.0A
Power Consumption	20W POE 802.3at (Heater OFF) or 32W POE 802.3bt (Heater ON) or 48V DC
Pole Mount	Pole Diameter within 3 - 4 inches +/- 3° vertical adjustment
Operating Temperature	-40 to 50° C (-40 to 122° F)
Weatherproofing	IP65 Rated

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