



Trinity-318 TDD Redundancy

Product Application

- Hotstand-by for any Microwave connection up to 15 km
- Extended Microwave Range during rough conditions
- Ultra-High reliability for critical connections

About Trinity-318 TDD Redundancy

Our unique Repeatit Anti-Loop and Ring Protection feature are what makes the Trinity-318 TDD Redundancy special. This allows a Network operator to access the Trinity-318 TDD Redundancy link through the management port to enable Ethernet Bridge Mode without the risk of creating a network loop even when the microwave link had a complete hardware or power outage.

The Trinity-318 TDD Redundancy is a Full-Outdoor Wireless Link operating in the 3 or 5 GHz bands providing up to 245 Mbps for distances up to 15 km. It is the ideal solution to create a wireless redundancy for any Microwave connection.

By connecting Trinity-318 TDD Redundancy directly with any microwave link, gives the microwave link a 100% bandwidth redundancy in case of the weather conditions are getting too rough for the microwave link or a Line-of-Sight issue occurs temporarily (e.g. like a crane moving in the LoS).

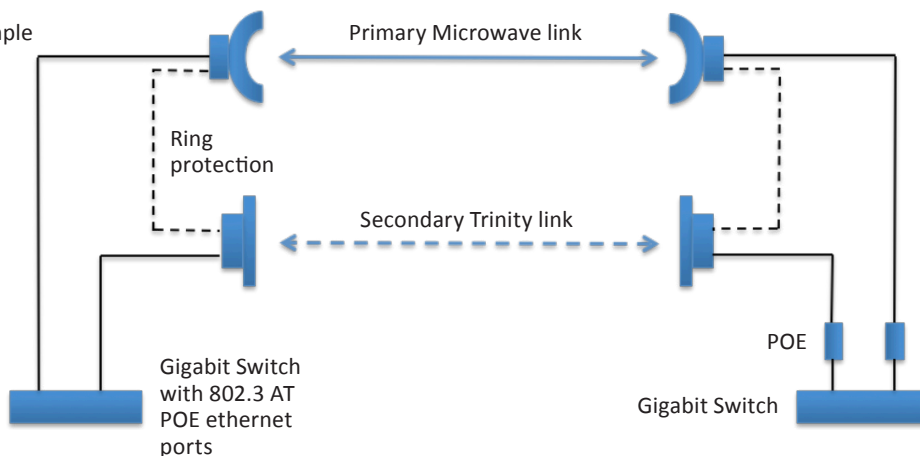
These features combined with additional extensive Carrier Class features like e.g. Multi-Link Synchronization for dense installations and the best price-performance ratio in the market, turn the Trinity 318TDD Redundancy into a perfect solution for any Microwave network with the need for high reliability and availability.

Product Highlights

- 245 Mbps aggregated net throughput up to 15 km distance
- 2 integrated Gigabit Ethernet Ports
- Repeatit Anti-Loop & Ring Protection Feature
- 3.35-3.75 GHz and 5.150-5.845 GHz
- IP67 Full-Outdoor Housing
- Integrated 18 dbi Dual Pol Antenna
- TDD Synchronization for dense Installations
- Easy alignment with LED & Alignment Sound
- Four QoS traffic classes & VLAN Support
- Variety of channel widths: 5/10/20/40 MHz
- Free of Charge Repeatit Cloud Network Management



Configuration example



Trinity-318TDD Plus

Radio

Frequency Bands	5.150–5.845 GHz
Channel widths supported	5/10/20/40 MHz
Capacity	Trinity-318TDD Plus: 245 Mbps
Duplex Technique	TDD
Modulation	OFDM, PSK/QPSK/16QAM/64QAM
Max Tx Power	23 dBm
Max Rx sensitivity	-97 dBm
Error Correction	FEC; k=1/2,2/3,3/4, 5/6
Encryption	128 bit AES & MAC Level Authentication
Surge Protection	15kV
Antenna Protection	Internal DC Grounding
DFS	Yes
QoS	Four Access Categories (AC) Voice, Video, Best Effort, and Background Traffic classification according to WMM
Bandwidth control	Yes

Inbuilt Antenna

Gain, typ.	18 dBi
VSWR	≤ 1.8
3 dB Beam-Width, H-Plane, typ.	17°
3 dB Beam-Width, E-Plane, typ.	17°
Polarization	Dual, Vertical and Horizontal Dual slant if mounted plus/minus 45°

Ethernet Interface

Type	10/100/1000 BaseT Interface with Auto-negotiation (IEEE 802.3), Manual Repeatit Anti-Loop and Ring Protection feature
Number of Ethernet Ports	2
Framing/Coding	IEEE 802.3u
Traffic Handling	MAC layer bridging, self-learning 802.1q transparent
Data Latency	2-4ms (3ms typical)
Packets/second	> 40 000
VLAN ID for Management	Supported
Power over Ethernet	48V DC, 802.3af, <6W typical
Connector	RJ-45

Management

Link Management Protocol	Web interface SNMP
NMS Application	Repeatit Cloud Network RCS Management Service
Tools in web interface	Spectrum Analyser Speed Test

Certifications

Radio	FCC Part 15.247 ETSI: EN 301 893 V1.5.1 ETSI EN 302 502 V1.2.1
EMC	FCC part 15 class B, EN 55022:2010 Class B EN 55024:2010 ETSI EN 301 489-1 V1.9.2 ETSI EN 301 489-17 V2.1.1
Safety	IEC 60950-1 EN 60950-1
Health	EN 62311:2008

Environment

IP Code	IP67
Temperature	-40° / +55° C
Size	270 x 270 x 75 mm
Weight per unit	2.9 Kg

Distance	Trinity-318TDD Plus
< 1 km	245 Mbit
2 km	242 Mbit
3 km	194 Mbit
4 km	130 Mbit
5 km	129 Mbit
6 km	129 Mbit
7 km	85 Mbit
8 km	85 Mbit
9 km	64 Mbit
10 km	63 Mbit

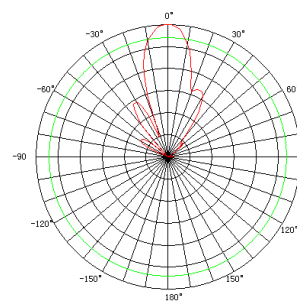
Throughput UDP, 30dB max ETSI EIRP, 6dB margin

Radiations Patterns

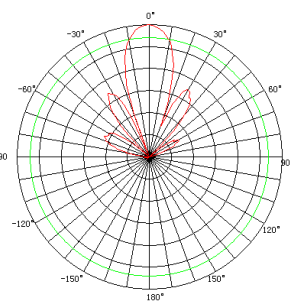
Frequency 5500 MHz
Gain, typ. 18 dBi

Vertical Polarization

E-Plane Pattern

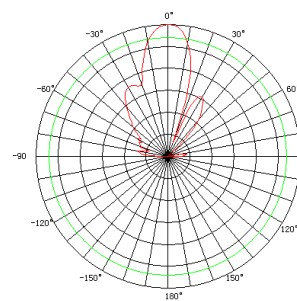


H-Plane Pattern



Horizontal Polarization

E-Plane Pattern



H-Plane Pattern

