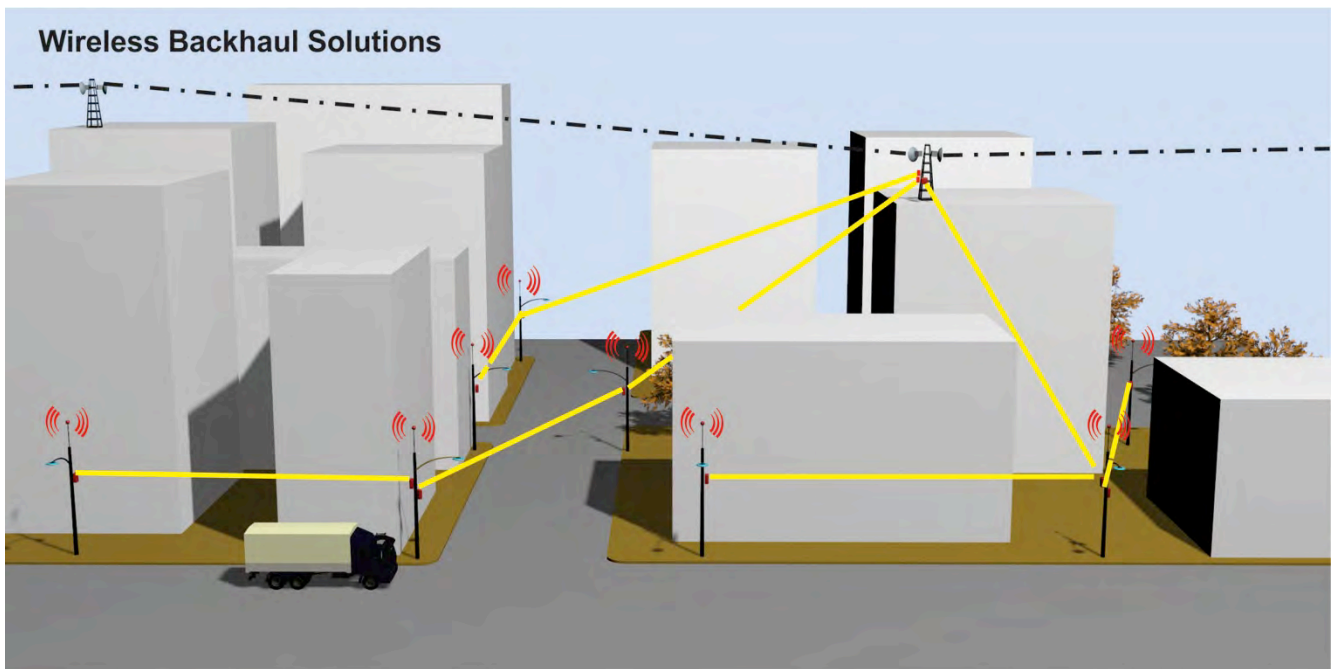




StarLink

Microwave Backhaul Radio Link



StarLink Microwave is a high capacity IP backhaul radio ideally suited to a broad range of backhaul applications for Mobile and ISP Networks.

Introduction

The StarLink Microwave is a versatile wireless point-to-point IP backhaul solution. StarLink is available in selected licensed and unlicensed frequency bands between 6 GHz and 24 GHz (including the 17 and 24 GHz unlicensed bands).

Optimized for cost-effective IP backhaul, the StarLink Microwave provides up to 400 Mbps Full Duplex throughput with low latency. The capacity and channel bandwidth are software adjustable between 14 and 56 MHz with hitless adaptive modulation from QPSK to 1024QAM.

The StarLink is designed to meet service providers' stringent requirements for a high capacity, low cost of ownership carrier-grade backhaul solution.

Features

- Zero footprint, all Outdoor solution with integrated antenna.
- Available in frequency bands from 6 to 24 GHz
- Up to 400 Mbps full duplex with Adaptive coding and Modulation (HAACM)
- Scalable channel bandwidth: 14 to 56 MHz with flexible modulation (QPSK-1024QAM)
- Network Synchronization with SyncE and IEEE1588 v2
- PoE and coaxial (N-type F) power connection
- Jumbo frame support up to 9600 bytes, layer-2 switching, auto MDI/MDXI, VLAN, QoS, QinQ, STP/RSTP, RLS
- SNMP as well as Local management capability
- RF and baseband loopback

This High Capacity IP backhaul radio gives up to 400 Mbps throughput, a perfect connectivity tool.

Specifications

Transmitter Characteristics

Freq Band	6,5 GHz	7 / 8 GHz	11 GHz	13 / 15 GHz	17 GHz	18/23/24 GHz
Modulation	Level (dBm)	Level (dBm)	Level (dBm)	Level (dBm)	Level (dBm)	Level (dBm)
QPSK	25	25	23	23	-15	21
16QAM	23	23	22	22	-13	20
32QAM	22	22	21	21	-13	19
64QAM	21	21	20	20	-12	18
128QAM	20	20	19	19	-12	18
256QAM	20	20	18	18	-11	17
512QAM	19	19	18	18	-11	16
1024QAM	18	18	17	17	-10	-
Flange	UBR84	UBR84	UBR100	UBR140	UBR220	UBR220

Receiver Sensitivity 10⁻⁶ (dBm) and Throughput

Freq Band	6,5 GHz		7 / 8 GHz		11 GHz		13 / 15 GHz		17 GHz		18/23/24 GHz	
Channel	40 MHz		28 MHz		40 MHz		28 MHz		40 MHz		56 MHz	
Modulation	RSL	Mb/s	RSL	Mb/s	RSL	Mb/s	RSL	Mb/s	RSL	Mb/s	RSL	Mb/s
QSPK	-82,3	64.3	-83,7	45.0	-81,8	64.3	-83.1	45.0	-82,3	64.3	-79,7	90.0
16QAM	-75,9	128.5	-77,3	90.0	-75,5	128.5	-76.8	90.0	-75,9	128.5	-73,6	180.0
32QAM	-72,9	160.6	-74,5	112.5	-72,5	160.6	-74.0	112.5	-72,9	160.6	-70,6	224.9
64QAM	-70,0	192.8	-71,5	135.0	-69,5	192.8	-71.2	135.0	-70,0	192.8	-67,6	269.9
128QAM	-67,0	224.9	-68,5	157.4	-66,5	224.9	-68.0	157.4	-67,0	224.9	-64,6	314.9
256QAM	-64,0	257.0	-65,4	180.0	-63,5	257.0	-65.1	180.0	-64,0	257.0	-61,6	359.9
512QAM	-61,0	289.2	-62,4	202.4	-60,5	289.2	-61.9	202.4	-61,0	289.2	-58,6	404.8
1024QAM	-57,4	321.3	-57,9	224.9	-56,9	321.3	-57.4	224.9	-57,4	321.3	-	-

Ethernet

Switch type	GE Layer 2	QoS	802.1p
Max frame size	9600 bytes	QoS queuing	Yes
MAC table	1k entries, auto learning &	VLAN support	802.1Q, QinQ
Packet buffer	31kBB; non-blocking store	Spanning tree protocol	802.1D-1998 STP&RSTP
Flow control	802.3x	Synchronization	SyncE and IEEE1588v2(TC)

Network Management

SNMP	SNMP traps, MIB, SNMP v1/v2c
EMS	Web-based http, Telnet, FTP, SNMP

Ports

Gigabit Ethernet	Full-duplex or half-duplex electrical (RJ45) and optical GE (SFP)
Service ports	BNC for RSSI; Ethernet RJ45 (in-band) for Management

Power and Environmental

Power	N-type female or PoE
Power Supply	-48V±20%
Power Consumption	<40W
Ambient Temperature	-35~ +55°C
Weight & Dimension (kg/mm)	6 / 315×265×130
Humidity / IP Rating	All weather / IP67

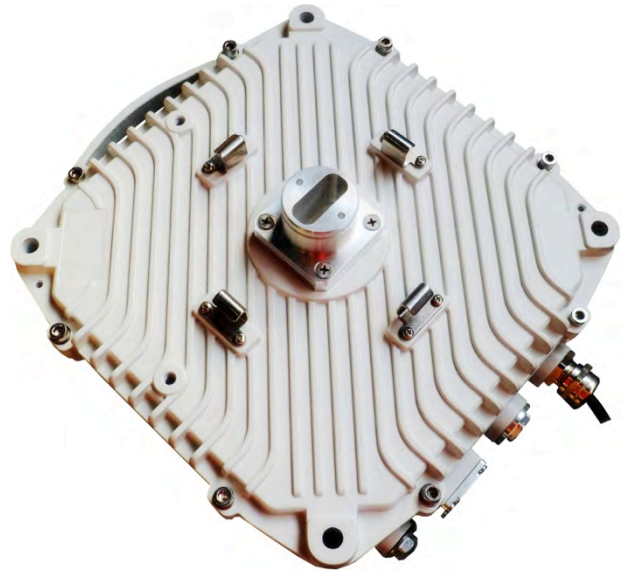
Applications:

■ **Cellular Backhaul** - StarLink is a perfect fit for 3G/LTE/WiMAX base station backhaul to replace optical fiber and FSO, ideally for new all-packet base station, and caters to various connection needs: voice, data, management and control. With SyncE synchronization, StarLink could meet any RAN network requirement.

■ **Broadband Access** - StarLink is an affordable medium capacity radio solution for enterprises that need private lines and broadband Ethernet traffic.

■ It offers solutions with fine combination of cost effectiveness & short commission time for the following applications:

- DSLAM backhaul
- No right-of-way
- Extending network from a fiber POP
- Private Communication networks.



■ **ISP Backhaul** - StarLink allows ISPs to quickly establish backhaul without quality compromises.

ISPs can grow their profits by delivering services with guaranteed SLA or reaching distant clients from their PoP using radios with similar cost at either licensed frequencies or unlicensed frequencies.

MIMOTech (Pty) Ltd

64 White Rd, Retreat

Cape Town, 7945, South Africa

www.mimotechnology.com

sales@mimotechnology.com



Simplicity is the Ultimate Sophistication

