HIGH-CAPACITY

BT 80G
new 2Gbps version

BT 80G is a Full-Duplex microwave link operating in the **71-76 / 81-86 GHz** license-free band. The BT 80G link can provide up to **2 Gbps** throughput using **16 QAM** modulation and **750 MHz** bandwidth. The Radio also includes advanced Ethernet settings.
It is designed as a Full Outoor Unit (unit L and H) with direct mounting to a parabolic antenna. These properties give service providers great flexibility and speed in building up their networks. Top-quality components and durable cast-aluminium design allows the radio link to be used in very difficult climatic conditions.

This PtP technology has been developed and manufactured by SUMMIT DEVELOPMENT, an established Czech manufacturer of microwave links, at their own software digital radio.

CHARACTERISTICS

- Software Defined Radio SUMMIT DEVELOPMENT in Full Outdoor design

- Transsmision capacity up to 2 Gbps full duplex

- In case of failure automatically switches to a backup link

- 4 x Gigabit Ethernet port (2 x SFP, 2 x RJ45)

- Jumbo packet transfer of MTU size up to 11 000 bytes

- Security and Access management, digitally encrypted transmitter

- Advanced QoS Port-based and Bandwidth control Management

- Optimal solution for Triple Play services with IPTV support

- Supports IEEE 802.1Q VLAN (also QinQ)

- Supports packet-flow control acc. to IEEE 802.3x

- Power supply via Ethernet cable acc. to IEEE 802.3at

- Power supply via separate cable (DC input 20 to 57V)

- Automatic switching to backup power supply (PoE1, PoE2, PWR)

- Built-in spectral analyzer for searching for a free channel

- Easy aligning with the beeper, built-in RSSI indicator or measuring the DC voltage

- Configuration of radio link in Windows, Linux, Android, iOS

- Monitoring of radio parameters by means of IP protocol, with implemented SNMPv2

- Monitoring of device parameters in real time (input voltage, current, power ...)

- Automatic detection of radio polarization

- Direct installation of parabolic antenna

HIGHLY RELIABLE MICROWAVE PTP LINKS

PARAMETERS

GENERAL RF

Frequency band	71-76 GHz / 81-86 GHz
Channnel size	750 MHz
Modulation	2 / 4 / 8 / 16 QAM
FEC	Reed-Solomon, Interleaving
ACM	Yes
Frequency stability	± 5 ppm

MECHANICAL

Mechanical concept	Full Outdoor
Dimension	145 mm x 240 mm x 240 mm
Weight	3,5 kg

TRANSMITTER

Output power	-10 to +12 dBm (± 2 dB)
APC (Autom. Power Control)	Yes
APCmin, APCmax	Yes

POWER SUPPLY & CABLE

Power Over Ethernet	IEEE 802.3at (PoE+)
Separate DC power supply	20-57 VDC
Power consumption	up to 30 W
Ethernet cable Outdoor	FTP CAT5e max. 100 m

TRANSMISSION CAPACITY (750MHz channel)

Capacity of radio [Mbps]	Modulation	Sensitivity	
		for BER 10-6 [dBm]	for BER 10-9 [dBm]
1912	16 QAM	-62	-60
1434	8 QAM	-64	-62
956	4 QAM	-69	-67
478	2 QAM	-71	-69

ENVIRONMENTAL

Operational temperature	-20°C to 50°C
Ingress Protection	IP-67

ANTENNAS

Type	Diameter [cm]	Gain [dBi] / [GHz]	Gain [dBi] / [GHz]
ANT 80B35-C3	35	45 / 71	50 / 86
ANT 80B65-C3	65	46 / 71	51 / 86

COMPLIANCE

IEEE 802.3	1000 Base-TX, 1000 Base-T
IEEE 802.3az	Energy Efficient Ethernet
IEEE 802.3x	Flow Control
IEEE 802.1q	VLAN tagging, QinQ
IEEE 802.3u	Auto-Negotiation protocol
IEEE 802.3at	Power Over Ethernet plus

USER INTERFACE

Eth1, Eth2	2 x 10/100/1000 Base-T
SFP1, SFP2	2 x 1000Base-SX / 1000Base-LX
GUI	SMS(Windows, Linux-Wine)
WUI	SMS (Web browser), read-only
MUI	SMS (Android, iOS)