

# ALCOMA AL80GE

Technology for the Next Generation Networks

The Easiest  
**The Fastest**  
The Most Complex

**70 / 80 GHz | 1.25 Gbps**



## Features

- ▲ Unlicensed / Licensed band  
71–76 / 81–86 GHz
- ▲ Transmission capacity 1.25 Gbps
- ▲ 2× Gigabit Ethernet  
Optical / Electric interface
- ▲ Typical link distance 5 km for 99.99%  
availability (Rain zone 32 mm/h)
- ▲ Low Latency < 12 μs
- ▲ Jumbo packets up to 10,240 Bytes
- ▲ Automatic TX power control (ATPC)
- ▲ All-Outdoor design with antennas  
0.35 or 0.65 m
- ▲ Full overvoltage protection of ODU unit

## Management

- ▲ Proprietary network management  
system ASD
- ▲ Software configurable
- ▲ Independent diagnostic channel
- ▲ SNMP protocol
- ▲ WEB interface
- ▲ SQL database
- ▲ Command line Interface
- ▲ System Configuration 1+0 or 1+1

## Protected Terminal Box

- ▲ Full overvoltage protection
- ▲ Optional redundant power feeding
- ▲ DIN rail or rack mount compatible
- ▲ Compact 1U rack unit for 3 terminal boxes

## Ethernet

- ▲ QoS support (VLAN p-bit/DSCP/port priority)
- ▲ Full support of VLAN and QinQ (802.1Q,  
802.1ad)
- ▲ Two independent Ethernet lines through  
radio link
- ▲ Ethernet port shutdown when the radio  
link is bad

## Applications

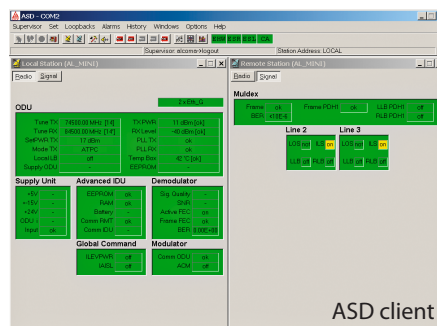
- ▲ WiMAX / LTE / 4G backhaul
- ▲ Local / Metropolitan / Wide area networks
- ▲ Multimedia applications
- ▲ IPTV distribution
- ▲ Replacement of an optical cable



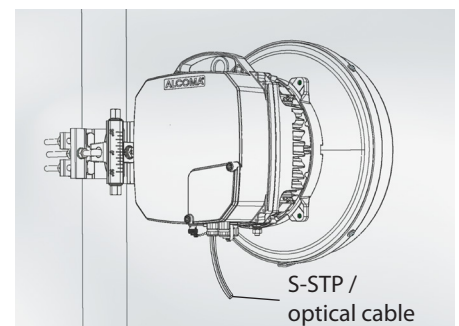
ODU with antenna



Compact 1U rack unit for 3 terminal boxes



ASD client



S-STP /  
optical cable

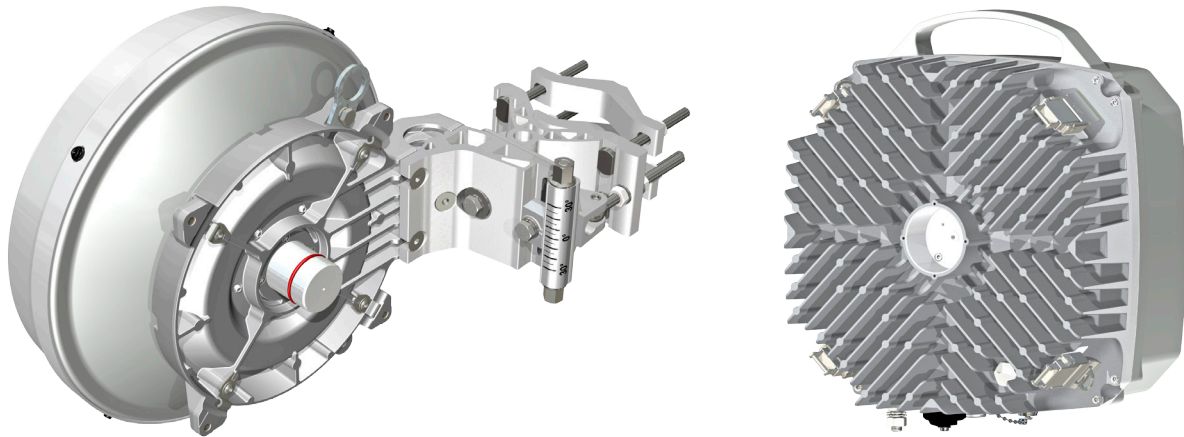
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[www.alcoma.com](http://www.alcoma.com)



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Technology for the Next Generation Networks



General	AL80GE
Frequency Band (GHz)	71–76 / 81–86
Modulation	DBPSK
RF Interface	FDD
Data Rate total/user (Mbps)	1250 / 1000+150 full duplex
Latency (µs)	12
System Configuration	1+0, 1+1
<b>Radio</b>	
Transmit Power Output max. (dBm)	+20
Automatic Transmit Power Control	ATPC
Frequency Stability	< ±10 ppm
Forward Error Correction	Reed-Solomon
RX Sensitivity BER=10 <sup>-6</sup> (dBm)	-63
<b>Interfaces</b>	
Interface	1–2x 1000Base-T, 1x 1000Base-SX/LX/BX10
<b>Management</b>	
	In band / out of band management, Ethernet / RS-232 interface Advanced management system ASD / SNMP v1
<b>Ethernet</b>	
	Flow Control, QoS (802.1p), VLAN (802.1Q), QinQ (802.1ad), MTU 10240 B
<b>ALCOMA Antennas</b>	
0.35 m Mid Band Gain (dBi)	45.5
0.65 m Mid Band Gain (dBi)	51
Polarization	Vertical / Horizontal
<b>Power Supply and Cabling</b>	
Range (V)	36 to 72 DC, floating ground
Power Consumption (W)	up to 40
ODU connection	S-STP / S-FTP Cat.7 cable up to 100 m length / optical fiber
<b>Operating Temperature</b>	
ODU (°C)	-35 to +55
Overvoltage Protected Terminal Box (°C)	-25 to +50
<b>ODU / Terminal box Dimensions and Weight</b>	
Width × Height × Depth (cm)	25.5 × 30.9 × 17.5 / 14.7 × 16.3 × 4.4
Weight (kg)	6.4 / 0.5

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For more technical information please see [www.alcoma.com](http://www.alcoma.com).



ALCOMA, the Czech company founded in 1993, is a leading designer and producer of point-to-point microwave and millimeter wave radio relay links. All production is manufactured in its own factories in Prague and Kolin.

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