

## SparkMAX Broadband Wireless Access solution



SparkMAX is WiMAX  
standard (IEEE 802.16-2004)  
based point-to-multipoint solution.

**SPARKMAX**  
WiMAX technology





# SparkMAX



The SparkMAX series of Base Stations and Subscriber Stations is targeted at operators who anticipate building a business case on moderate average revenues per user.

The SparkMAX Base Stations is Stand-alone solution for building Base Station sites. Each cell sector is covered with one SparkMAX Base Station Controller. Subscriber Station is a cost effective and flexible product designed to support a wide range of telecom operators' business models for broadband wireless access.

## Technical data

Common data	RF PHY	256 FFT OFDM
	Duplex Method	TDD, HD-FDD
	Frequency Bands	3.3 -3.8, 5.470 – 5.825 GHz
	Channel Bandwidth	1.75, 3.5, 7, (14) MHz
	Centre Frequency Step	250 kHz
	Frequency Stability	+/- 2.5 ppm
	Modulation Coding Rates	Dynamic Adaptive Modulation (bi-directional) Auto-select: 64QAM, 16QAM, QPSK, BPSK Auto-select: 1/2, 2/3, 3/4
	Spectral Efficiency	Up to 5 bps/Hz (over-the-air)
	Latency	6-18 msec
	Network Attributes	Transparent bridge, 802.1Q VLAN, 802.1p network traffic prioritization, DHCP, client pass-through
	Over the Air Encryption	DES and AES
	Network Management	SNMP, standard and proprietary MIBs
	Standards	EN 301 489-1, EN 301 489-4, EN 5022/CISPR 22, EN 302 326, IEC 60950-1, EN 60950-1, UL 60950-1, 802.16-2004

Technical data BS	TX Power	+ 23 dBm
	RX Sensitivity	at 3.5 MHz, BPSK -93 dBm
	RF Dynamic Range	> 43dB (0.2 dB step)
	Network Connections	10/100BaseT Ethernet on RJ45, optional 1G Ethernet on SFP, or TDM
	Management Interface	10/100 BaseT on RJ 45
	Power Supply	110/220/240 VAC 50/60Hz, 18-72VDC, 75W
	Temperature	IDU 0 to 40 C, ODU -40 to 60 C
	Dimensions	431.8 mm x 304.8mm x 44.45mm

Technical data CPE (All Outdoor)	TX Power	+ 20 dBm
	RX Sensitivity	at 3.5 MHz, BPSK -96 dBm
	RF Dynamic Range	> 40dB (0.25 dB step)
	Network Connections	10/100BaseT Ethernet on RJ45
	Power Supply	PoE injector 110/220/240 VAC 50/60 Hz meets IEEE 802.3af PoE
	Temperature	ODU -40 to 60 C
	Dimensions	190 mm x 190 mm x 70 mm (with integrated 15 dBi antenna)

Different BS antennas and optional CPE antennas are available. Indoor CPE is possible. Check for different frequency bands and interfaces available. Please see detailed documentation or contact representative.