The affordable Wireless LAN Outdoor
solution for broadband distribution

Performances and quality at low cost

Urban series is the result of the Linkit laboratories study carried, to optimize the performance, quality and cost ratio, applicable to new generation wireless transmission systems.

**Effective dual frequency
MIMO Option up to 300Mbps**

Urban systems include 1, 2 or 3 radio modules, in compliance with IEEE 802.11a/b/g/n standards.
Thanks to the use of external dual polarity MiMo antennas, the Urban devices in compliance with 802.11n standard, allow signal connection up to 300Mbps for each single radio module.

Following tables shows all Urban version.

Model	Radio Nr.	Data Input	Standard	Band	Data Rate
URB4020	2	LAN	802.11a/b/g	2,4 GHz / 5 GHz	2 x 108Mbps
URB4030	3	LAN	802.11a/b/g	2,4 GHz / 5 GHz	3 x 108Mbps
URB4210N	1	LAN	802.11b/g/n	2,4 GHz	300Mbps
URB4510N	1	LAN	802.11a/n	5 GHz	300Mbps

Flexibility

The Urban systems in compliance with IEEE802.11n standard, are equipped with data LAN 10/100/1000 port, allowing full use of the product rates.
Each Urban products can be customized for the most diverse application scenarios by connecting different external antenna types (directive,   sectorial, omnidirectional etc.). Output power limitation allows the use of high-gain antennas while conforming to regulations on radiated energy levels.
Each radio module can be separately configured for Access Point, Bridge or Station operation; the modules are internally connected through IP routing. Urban products support a proprietary protocol for the creation and management of mesh networks.

Access Point with bandwidth management

Urban appliances allow comprehensive bandwidth management. Both the upstream bandwidth and the resources available to each client, can be monitored, prioritized and limited as required in order to attain the desired Quality of Service levels.
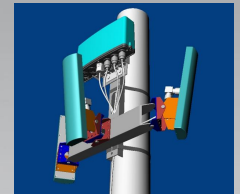
Features

Small size, sleek and actractive appearance, easy installation and high modularity, make the Mediafeed ideal for all the network applications.
The complete electromagnetic shielding is ensured by internal metal shield for the protection of the routerboard. Manufactured in ABS and fiberglass, guarantees high resistance to environmental weathering.

URBAN series

Urban Base stations represent the optimization of performance, quality and cost ratio, applicable to new generation wireless transmission systems, specially designed for WISP. Urban uses external antennas and integrates up to 3 radio modules, in compliance with 802.11 a, b, g, n standards. The attractive design with simple and essential lines, combined both to its small size and to the innovative hook "at pole" (you can install the Base Station on poles up to 400 mm in diameter), allow the installation of the equipment in any place and in a fast and safe way.

The version with one radio module is available with Giga Ethernet data port and 802.11 n standard 2 GHz or 5 GHz, to transmit Data Rate up to 300Mbps.

An efficient testing function, allows to solve the antenna alignment problem. Furthermore, from each site, is possible to check the signal level received on remote equipment. Installation and maintenance became smart and easy.

Frequency scan function, with relevant spectrum analysis , permits free channels identification during start-up phase.

Urban equipment are manageable through web interface or dedicate GUI, also via internet.

The equipment can store all the traffic logs regarding access and traffic connection. An FTP server and about 100MByte memory are housed on board to store files and data.

Connection and data security are guaranteed by a WEP key of 104 bit with WPA and WPA2 access control.

802.11n SISO standard complies, allows to reach data rates up to 150Mbps.

Time link worsening as well as latency problem, have been eliminated thanks to a dedicate firmware and hardware project.

Urban is the solution for the development of network dedicated to video, data and VoIP transmission.

Intelligent management of the signal's priority and of bandwidth allocation, allows to satisfy all the request in terms of Quality of Service QoS.

Technical Characteristics	URB4020	URB4030	URB4210N	URB4510N
Nr. Radio module	2	3	1 MIMO 2x2	
IEEE Standard	802.11a/b/g Hiperlan 2		802.11b/g/n	802.11a/n
Frequency	2,400 - 2,483 GHz	5,470 - 5,725 GHz	2,400 - 2,483 GHz	5,470 - 5,725 GHz
Modulation	DSS (DBPSK, DQPSK, CCK) OFDM (BPSK, QPSK, 16-QAM, 64-QAM)			OFDM (BPSK, QPSK, 16-QAM, 64-QAM)
Channel Bandwidth	5MHz-10MHz-20 MHz-40MHz		20 MHz - 2x20 MHz	
Channel Management	Manual - Automatic - DFS - Radar Free			
Antenna Type	External (50 ohm N Female conenctor)			
Nr. antenna connectors	2	3	2	
Maximum Output Power	+ 18 dBm		+ 25 dBm	
Power Adjustment	from -2 dBm up to + 18 dBm step 1 dB		from + 5 dBm up to + 25 dBm step 1 dB	
RX Sensitivity	2,4GHz	5GHz	2,4GHz	5GHz
	-95 dBm @ 1 Mbps	-90 dBm @ 6 Mbps	-93dBm @ MCS0 20MHz	-96dBm @ MCS0 20MHz
	-90 dBm @ 6 Mbps	-81 dBm @24 Mbps	-91dBm @ MCS0 40MHz	-91dBm @ MCS0 40MHz
	-90 dBm @ 11 Mbps	-76 dBm @ 36 Mbps	-77dBm @ MCS7 20MHz	-76dBm @MCS7 20MHz
	-73 dBm @54 Mbps	-73 dBm @ 54 Mbps	-74dBm @ MCS7 20MHz	-73dBm @ MCS7 40MHz
Wireless Mode	Access Point, Bridge, Repeater, WDS, Station, Hot Spot			
Data Encryption	WEP 64/128 bit; WPA, WPA2, TKIP, AES-CCM-TKIP, PSK/EAP, Mac Filtering, IP Filtering, Radius Server, Proprietary WDS, Firewall Integrato			
Ethernet Standard	10/100 Base-T — Auto MDI/X — std.802.3		10/100/1000 Base-T Gigabit — Auto MDI/X — standard 802.3	
VLAN Support	802.1q - Multiple VLAN interface – Inter VLAN routing			
VPN Support	IPSEC, PPPoE, EoIP, PPTP, L2TP			
QoS Support	802.1p - IPToS RFC791 - CBQueuing - PCQ, RED, SFQ, FIFO queue - CIR - MIR - peer-to-peer management			
Network Routing	OSPF – RIP - BGP - STP - RSTP - NAT – MPLS – IPv6 - MME			
Mesh	HWMP+ , proprietary layer 2 wireless mesh routing protocol			
Management	Telnet, SSH, FTP, Proprietary GUI, WEB			
Power Supply Type	Power Over Ethernet (POE) Technology			
Power Supply	18Vdc 450mA	18Vdc 650mA	18Vdc 550mA	
Operating Temperature	- 35°C / +60°C			
Dimension mm (H x L x D)	150 x 260 x 60			
Weight	1,1 Kg			
Mounting pole diameter	30 - 50 mm with mast clamp or 50 - 400mm with metal strip			
Protection	IP66			
Standards	EN301893 EN300328 EN301489-17 EN60950-1 ERC70-03		EN301893 EN301489-17 EN60950-1 ERC70-03	