

Professional Outdoor Base Station External Antenna

Performances and quality at low cost

IEEE802.11a/n/ac MIMO 2x2

Optical fiber option

Gigabit Ethernet

Total protection 16kV - 15kA

Flexibility

Access Point with bandwidth management

Features

Mediafeed Plus series is the Linkit answer at the growing demand for Base Station appliances, combining high reliability and performance with an affordable price tag.

Mediafeed systems include 1 or 2 radio modules, in compliance with IEEE 802.11a/b/g/n/ac standards.

Thanks to the use of external dual polarity MiMo antennas, the Mediafeed devices in compliance with 802.11ac standard, allow signal connection up to 867Mbps for each single radio module.

To eliminate high power noise on data LAN cable, Mediafeed series makes available a version with multi-mode optical fiber data connection: MDF2510AC-F. Using optical fiber connection, all the high power noises are cancelled and the performances of Mediafeed device are guaranteed.

Following table shows all Mediafeed Plus versions

Model	Radio Nr.	Data Input	Standard	Band	Data Rate
MDF2020	2	LAN	802.11a/b/g	2,4 GHz / 5 GHz	2 x 108Mbps
MDF2020N	2	LAN	802.11a/b/g/n	2,4 GHz / 5 GHz	2 x 300Mbps
MDF2210N	1	LAN	802.11b/g/n	2,4 GHz	300Mbps
MDF2510N	1	LAN	802.11a/n	5 GHz	300Mbps
MDF2510AC	1	LAN	802.11a/n/ac	5 GHz	867Mbps
MDF2020AC	2	LAN	802.11a/n/ac	5 GHz	2 x 867Mbps
MDF2510AC-F	1	OPTICAL FIBER	802.11a/n/ac	5 GHz	867Mbps

All the Mediafeed systems, with exclusion of MDF2020, are equipped with data LAN 10/100/1000 port, allowing full use of the product rates.

Single radio systems are equipped with protection circuit for ESD coming from Ethernet cable or radio connection. Four dedicate gas arrester, are connected to all the data pairs of Gigabit Ethernet port to protect from current up to 15,000A.

Each Mediafeed 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. Mediafeed products support a proprietary protocol for the creation and management of mesh networks.

Mediafeed 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.

Small size, sleek and attractive appearance, easy installation and high modularity, make the Mediafeed ideal for all the network applications.

The shelf made entirely of aluminum, provides full electromagnetic shielding and high resistance to environmental weathering.



Mediafeed

Mediafeed series, represents the definitive "Base Station" solution to all the request from operator, WISP, System Integrator, Public Administration and Private. The newest solution integrated in the Mediafeed equipment, make it easier all the life cycle phases of a wireless network: design, installation, start-up, maintenance.

The simple and essential equipment design with little dimension, permits to install the equipment everywhere and in fast and safe way. Mediafeed systems integrate 1 or 2 IEEE802.11a/b/g/n/ac radio modules for connection of signal with data rate up to 2 x 867Mbps. All the Mediafeed systems, with exclusion of MDF2020, are equipped with protection circuit for ESD up to 16kV and 15kA coming from Ethernet cable or radio connection.



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

Mediafeed 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 access control.

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

Mediafeed 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.

Caratteristiche	MDF2020	MDF2020N	MDF2210N	MDF2510N	MDF2510AC	MDF2520AC	MDF2510AC-F
Number of Radio Modules	2	2 MIMO 2x2		1 MIMO 2x2		2 MIMO 2x2	1 MIMO 2x2
IEEE Standard	802.11a/b/g Hiperlan 2	802.11a/b/g/n	802.11b/g/n	802.11a/n		802.11a/n/ac	
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)	OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM)		
Channel Bandwidth	5MHz-10MHz-20 MHz-40MHz		20 MHz - 2x20 MHz		20 MHz - 2x20 MHz - 4x20 MHz		
Channel Selection	Manual - Automatic - DFS - Radar Free						
Type of Antenna	External (N Female 50 ohm connector)						
Number of Antenna Connectors	2	4		2		4	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				
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, Integrated Firewall						
Ethernet Standard	10/100 Base-T — Auto MDI/X — std.802.3		10/100/1000 Base-T Gigabit — Auto MDI/X — standard 802.3				
Optical Characteristics	N.A.						See tab.
VLAN Support	802.1q - Multiple VLAN interface - Inter VLAN routing						
VPN Support	IPSEC, PPPoE, EoIP, PPTP, L2TP						
QoS Support	802.1p - IPToS RFC791 - CBQueueing - 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 Mode	Power Over Ethernet (POE) type						
Ethernet Protection	N.A.		ESD 16kV - 15kA on the 4 pairs of wires				
Power Supply	18Vdc 450mA		18Vdc 550mA		18Vdc 600mA	18Vdc 700mA	
Operative Temperature	- 35°C / +60°C						
Dimension mm (H x W x D)	140 x 230 x 30 mm		140x270x30mm		140 x 230 x 30 mm		140x270x30mm
Weight	1,1 Kg		1,5 Kg		1,3 Kg		1,3 Kg
Pole Mounting	3060 mm diameter						
Safety Rating	IP67						
Standards	EN301893 EN300328 EN301489-17 EN60950-1 ERC70-03			EN301893 EN301489-17 EN60950-1 ERC70-03			

Rx Sensitivity

	2.4GHz	5GHz
MDF2020	-95 dBm @ 1 Mbps	-90 dBm @ 6 Mbps
	-90 dBm @ 6 Mbps	-81 dBm @24 Mbps
	-90 dBm @ 11 Mbps	-76 dBm @ 36 Mbps
	-73 dBm @54 Mbps	-73 dBm @ 54 Mbps
MDF2020N	-93dBm @ MCS0 20MHz	-96dBm @ MCS0 20MHz
	-91dBm @ MCS0 40MHz	-91dBm @ MCS0 40MHz
	-77dBm @MCS7 20MHz	-76dBm @MCS7 20MHz
	-74dBm @ MCS7 40MHz	-73dBm @ MCS7 40MHz
MDF2520AC	N.A.	-96dBm @ MCS0 20MHz
	N.A.	-91dBm @ MCS0 40MHz
	N.A.	-76dBm @MCS7 20MHz
	N.A.	-73dBm @ MCS7 40MHz

	2.4GHz	5GHz
MDF2210N	-93dBm @ MCS0 20MHz	N.A.
	-91dBm @ MCS0 40MHz	N.A.
	-77dBm @ MCS7 20MHz	N.A.
	-74dBm @ MCS7 20MHz	N.A.
MDF2510N	N.A.	-96dBm @ MCS0 20MHz
	N.A.	-91dBm @ MCS0 40MHz
	N.A.	-76dBm @MCS7 20MHz
	N.A.	-73dBm @ MCS7 40MHz
MDF2510AC	N.A.	-96dBm @ MCS0 20MHz
	N.A.	-91dBm @ MCS0 40MHz
	N.A.	-76dBm @MCS7 20MHz
	N.A.	-73dBm @ MCS7 40MHz

Optical Characteristics

Optical fiber connection is allowed by the integration of an SFP transceiver with the following characteristics

Characteristic	Description
Connector	Dual LC
Optical Fiber Type	Multi Mode
Wavelength	850nm
Data Rate	1,25 Gbps
Max optical fiber length	550 m