# FLUIDMESH 3200 BASE FLUIDMESH



#### **5GHZ WIRELESS BASE STATION**

The FLUIDMESH 3200 BASE is designed and manufactured for backhauling mission-critical video, voice and data. The product can be used to create point-to-point, point-to-multipoint, mesh, and mobility networks with a throughput up to 150 Mbps.



#### REDUCE THE COST OF NETWORK OWNERSHIP **SELECT THE AMOUNT OF THROUGHPUT YOU NEED**

Limit the cost of network ownership with FluidThrottle by selecting only the amount of throughput required. More throughput can be easily achieved by upgrading the system with software plug-ins when the traffic requirements increase. FluidThrottle makes Fluidmesh cost-effective and future-proof.



### PRODIGY 2.0 FOR RELIABLE MISSION-CRITICAL APPLICATIONS

Our MPLS-based transmission protocol is built to overcome the limits of standard wireless protocols and to deliver an infrastructure with a higher level of reliability. At the base of our innovative transmission protocol, there is a traffic optimization algorithm that allows every Fluidmesh radio to assign a specific level of priority and reliability to every packet transmitted. The result is a better, more reliable, multi-service wireless infrastructure.



#### WEB INTERFACE CONFIGURES, MONITORS AND TROUBLESHOOTS THE WIRELESS NETWORK

The FLUIDMESH 3200 BASE includes the FMQuadro web interface that allows you to configure, monitor, and troubleshoot the wireless network in real time, without any additional software. To simplify the configuration of the wireless network, the radio has a built-in spectrum analyzer and a real-time bandwidth monitoring tool.



#### YOUR INVESTMENT IS PROTECTED

Your investment is safe when business needs change. With FluidMAX, you don't have to replace your radios when you change the network's architecture from Point-to-Point to Point-to-Multipoint or Mesh. The FLUIDMESH 3200 Base can operate in CSMA or TDMA.



## WORKS WITH FLUIDITY, OUR UNIQUE MOBILITY SOLUTION

The FLUIDMESH 3200 Base supports FLUIDITY™, the ultimate broadband connectivity solution for high speed vehicles and trains. Providing up to 100 Mbps of usable throughput to vehicles travelling up to 225 Mph/362 Kmh is now a reality. There is no handoff time with FLUIDITY thanks to the "make before brake" seamless handoff, and it will maintain persistent network sessions and streams for any type of traffic.



#### **EASY INSTALLATION**

The FM 3200 Base has a compact form factor to minimize the impact of the

To facilitate installation it has an easy NPT-1 thread for conduit. The screws, located at the bottom, are self-retaining. The visible LEDs help you monitoring the LAN activity and the strength of the radio. The POE injector guarantees an easy setup.



# **QUICK PEEK**

#### RUGGED DIE CAST ALUMINUM HOUSING

Specific for harsh environments and long lasting performances. Co-location interference protection shroud

#### **FLUIDTHROTTLE**

Select only the throughput you need

#### **PRODIGY 2.0**

MPLS transmission protocol with intelligent QoS

#### **FMQUADRO**

Web-based interface to easily configure, monitor, and troubleshoot the network

Change network's architecture, not the radios

#### **FLUIDITY™**

Connectivity solution for high speed vehicles and trains

#### **MULTI FREQUENCY**

4.9 GHz and 5.1-5.8 GHz

#### **ETHERNET PORT**

802.3af PoE Gigabit

#### **EASY INSTALL**

NPT-1 threaded cable gland for conduit direct mounting



#### HEADQUARTERS.

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# FLUIDMESH 3200 BASE FLUIDMESH



**5GHZ WIRELESS BASE STATION** 









#### **SYSTEM**

Chipset	CPU	600 MHz MIPS Network processor	
	RF	MIMO 2x2	
Interfaces		1 x 10/100/1000 Tx-RJ45	
interraces		1 x 10/100 Base-Tx RJ-45	
		1 Reset button for factory default	
LED		1 x Power	
		1 x Ethernet 1	
		1 x Ethernet 2	
		4 X RSSI	
Weight/Dimentions		80 oz / 2.2 Kg	
		16(h) x 7(w) x 8(d) in	
		400(h) x 180(w) x 200(d) mm	

#### PADIO

RADIO		
Operating frequencies*	5150-5350 / 5470-5850 MHz	
	4940-4990 MHz 2350-2700/ 3350-3700 MHz	
Data rate	6/9/12/18/24/36/48/54Mbps 30/60/90/120/180/240/270/300 Mbps	
Modulation	OFDM (BPSK,QPSK,16QAM,64QAM)	
Channel width	5/10/20/40 MHz	
Output power** (dBm)	Up to 27	
Antenna Type	Sector 2x2 MIMO	
Antenna Gain	18 dBi	
Horizontal beamwidth coverage	120 deg	
Vertical beamwidth coverage	10 deg	

#### **ELECTRICAL**

Power method	48V Active 802.3af PoE	
	48V Passive PoE	
Power supply (included)	48V/0.5A PoE	
Max Power consumption	8 Watts	
ENVIDONMENTAL		

#### ENVIRONMENTAL

IP Rating	IP 66	
Enclosure	Die-cast metal aluminum	
Mounting	Pole Mounting Kit included	
Operating temperature	-40°C to 75°C -40°F to 167°F	
Shock and Vibration	ETSI300-019-1.4	
Operating Humidity	5% to 95% non condensing	

* Some frequencies may require minim	

<sup>\*\*</sup> Depends on configuration and regulations

#### EXPECTED THROUGHPUT \*\*\*

	THROUGHPUT (Mbps)	MAX DISTANCE (miles)	MAX DISTANCE (km)
	150	1	1,6
	120	1.5	2
	100	2	3
	60	2.5	4
	30	3	5

COMMUNICATION PROTOCOL		
Prodigy 1.0 and 2.0	Yes	

#### **REGULATORY COMPLIANCE**

	FCC Part 15.B, Fcc Part 15.C, FCC
	Part 15.E, NII/RSS-210 Annex
	9, FCC Part 90y, OET 65 MPE/
Approvals	RSS102, EN893+DFS, EN301189-1
	EN5502224, EN 62311,
	EN 60950, IC RS2010, CE, ROHS

#### **SECURITY**

VPN / L2TP	Yes
Full compatibility with AES, 3DES, RSA, HTTPS, SSL	Yes
AES link level Encryption	Yes

### **NETWORK**

Protocols	UTP, TCP, IP, RTP, RTCP,RTSP, HTTP, HTTPS, ICMP, ARP
Web based interface	Yes
Multicast support	Yes
UPnP support	Yes
SNMP support	Yes
802.1Q VLAN Support	Yes

#### **WARRANTY**

2 Years	Limited on parts and labor
3 Years	Optional
5 Years	Optional

#### **PART NUMBERS**

Hardware product (ethernet capacity up to 30 Mbps include	ded) FM3200B-HW
Ethernet Capacity up to 60 Mbps	FM3200-60
Ethernet Capacity up to 90 Mbps	FM3200-90
Unlimited Ethernet Capacity (up to 150 Mbps)	FM3200-UN
802.1Q VLAN Support	FM-VLAN
802.11 Wi-Fi	FM-AP
FLUIDITY™	Contact us

Fluidmesh Networks products are installed locally by professional System Integrators and are available worldwide through a network of Authorized Dealers. For additional information please call +1.617.209.6080 or visit us at fluidmesh.com



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<sup>\*\*\*</sup> Usable throughput can vary based on environmental conditions