# FLUIDMESH 1200 VOLO FLUIDMESH

# POWERFUL WIRELESS BACKHAULING

A 2x2 MIMO-based wireless radio, the FLUIDMESH VOLO is designed for backhauling mission-critical video, voice, and data. With a fully redesigned hardware platform, the FLUIDMESH VOLO is a data processing powerhouse. The FLUIDMESH VOLO is intuitive, easy to deploy, and can be used to create point-to-point, point-to-multipoint, mesh, and with a real throughput of upto 150 Mbps.



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

Limit the cost of 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 RELIABLE WIRELESS TRANSIMISSION FOR 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.



# UP TO 150 MBPS OF USABLE THROUGHPUT WITH VIRTUAL GIGABIT

The innovative FluidThrottle pricing allows throughput to scale as you grow by installing additional plugins. Virtual Gigabit allows you to continue growing all the way up to 150Mbps. By virtually bonding the Ethernet interfaces, real throughput above 100Mbps is just a click away.



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

The FLUIDMESH VOLO 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. VOLO can operate in CSMA or TDMA.



# **EASY INSTALLATION**

IP66 rated, the FLUIDMESH VOLO is designed for low visual impact and easy installation in harsh environments. To facilitate installation, the FLUIDMESH VOLO has a two cord watertight cable gland with a standard NPT-1 thread so you can run pre-made CAT5/6 shielded cables or conduit directly to the radio. The highly visible LEDs tell you the LAN activity and the signal strength. The low-power POE injector guarantees an easy setup.



# WI-FI SERVICE PORTAL

Quick troubleshooting and firmware upgrades can be done without getting out of your truck. For fast and low cost servicing, you can now wirelessly connect to the FLUIDMESH VOLO via a secure Wi-Fi 802.11n hotspot. The SSID is undetectable and password protected.



# SUPPORTED **ARCHITECTURES**

POINT TO POINT

POINT TO MULTIPOINT

MESH

# QUICK PEEK

# **FLUIDTHROTTLE**

Select only the throughput you need

# **PRODIGY 2.0**

MPLS transmission protocol with intelligent QoS

# VIRTUAL GIGABIT

Up to 150 Mbps usable throughput

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

# **FLUIDMAX**

Change network's architecture not the radios

# **MULTI FREQUENCY**

4.9 GHz and 5.1-5.8 GHz

# **DUAL ETHERNET PORTS**

Support PoE and multiple IP devices



# **FLUIDMESH 1200 VOLO**

# **POWERFUL WIRELESS BACKHAULING**

Range	Up to 5 miles / 8 km *
Frequency Bands	4.9-5.9GHz
Throughput	Up to 150 Mbps
Modulation	Up to 300Mbps
Transmission Power	Up to 27 dBm, depending on configuration and regulations
Receiving Sensitivity	-96dB@6.5 Mbps; -75dB@300Mbps;
Latency Per hop	< 0.3 ms
Antenna Type	Built in 2x2 MIMO Panel
Antenna Gain	16.1 - 17.1 DBi
Polarization	Dual Linear
Cross-pol Isolation	22dB minimum
Max VSWR	2.0:1
Horizontal Beamwidth Coverage	33 deg
Vertical Beamwidth Coverage	17 deg

# **COMMUNICATION PROTOCOLS**

Prodigy 1.0 and 2.0	Fluidmesh Intelligent	
Prodigy 1.0 and 2.0	Transmission Protocol	

# **ENVIRONMENTAL**

Operating Temperature	-40°C to 80°C -40°F to 176°F
Humidity	95% non condensing
Weather Rating	IP66
Wind Survivability	120Mph 193 Kmh
Shock & Vibration	ETSI 300 - 019 - 1.4
Wind Loading @ 125Mph/200kmh	<25lb/11kg

# SUPPLIED ACCESSORIES

POE injector 24VDC with US/EU/UK cord	Yes	
Staging Kit	Yes	

# **ELECTRICAL**

Power Input	Passive PoE from 12V DC to 24V DC
Power Consumption	Max 8W
Power over Ethernet Injector	Included, 90 to 260V, 50/60 Hz AC Input

# **PHYSICAL**

Interfaces	2 Internal RJ45 Ports. Shielded CAT5/6 cables and connectors are recommended.
Coupling	NPT-1 threaded cable gland
Dimensions (in)	13(h)x6.1(w)x3.1(d)
Dimensions (mm)	330.5(h)x156.6(w)x79.9(d)
Weight	18.34oz / 0.519Kg

### **POINT TO POINT USABLE THROUGHPUT\***

Throughput	Miles	km
100	3	5
50	4	6
20	5	8

# **NETWORK**

Protocols	UDP, TCP, IP, RTP, RTCP, RTSP, HTTP, HTTPS, ICMP, ARP	
Web Based INTERFACE	Yes	
Multicast Support	Yes	
UPnP	Yes	
SNMP	Yes	
802.1Q VLAN	Yes	

### **SECURITY**

VPN	Yes	
AES Link Level Encryption	Yes	
Full compatibility with AES, 3DES, RSA. HTTPS. SSL	Yes	

#### **APPROVALS**

FCC CFR 47 Part 15, class B	Yes	
Industry Canada RSS 210	Yes	
CE	Yes	

# WARRANTY

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

# **OPTIONAL SOFTWARE PART NUMBERS**

Hardware product (ethernet capacity up to 1 Mbps included)	FM1200V-HW
Ethernet capacity up to 2.5 Mbps	FM1200V-02
Ethernet capacity up to 5 Mbps	FM1200V-05
Ethernet capacity up to 10 Mbps	FM1200V-10
Ethernet capacity up to 30 Mbps	FM1200V-30
Ethernet capacity up to 60 Mbps	FM1200V-60
Unlimited ethernet capacity (up to 100 Mbps)	FM1200V-UN
802.1 Q VLAN Support Plugin	FM-VLAN
AES Link level Encryption Plugin	FM-AES
Virtual Gigabit Plugin	FM-GIGA

# SUPPORTED ARCHITECTURES









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



HEADQUARTERS.

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<sup>\*</sup> In optimal environmental conditions