FM 3100 ENDO

FLUIDMESH
NETWORKS

WIRELESS MADE EASY

The FM3100 ENDO is designed and manufactured for backhauling mission-critical video, voice and data. A 2x2 MIMO radio, the FM3100 ENDO can be used to create highly customized point-to-point, point-to-multipoint, mesh, and mobility networks with a throughput of up to 100 Mbps.

PICK YOUR OWN ANTENNA

Every installation is different. Now you can pick the antenna* that you need, depending on the problem that you want to solve. For long range links you can pick a parabolic dish external antenna or an omni-directional external antenna for mobile applications.

REDUCE THE COST OF 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. This solution makes Fluidmesh Networks the most cost effective and flexible wireless solutions provider in the market.

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 FM 3100 ENDO 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 FM 3100 ENDO has a built-in spectrum analyzer and a real-time bandwidth monitoring tool.

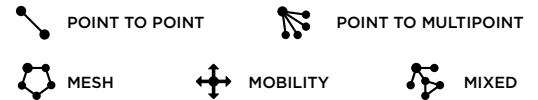### WORKS WITH FLUIDITY, OUR UNIQUE
MOBILITY SOLUTION

The 3100 ENDO supports FLUIDITY, the ultimate broadband connectivity solution for high speed vehicles. Providing up to 100 Mbps usable throughput to vehicles traveling at up to 200mph/320Kmh is now a reality. FLUIDITY features an industry leading roaming handoff of 3 ms, and will maintain persistent network sessions and streams for any type of traffic.

EASY INSTALLATION

FM3100 ENDO has a small form factor designed for low visual impact. To facilitate installation it has a watertight PG9 metal cable gland for shielded CAT5/6 cables, a removable bottom, and two RP-SMA connectors that allow you to pick the antenna that you need. The visible LEDs helps you understand the LAN activity and the strength of your signal. The POE injector guarantees an easy setup.

SUPPORTED ARCHITECTURES

POINT TO POINT		POINT TO MULTIPOINT	
MESH	MOBILITY		MIXED

QUICK PEEK

POWERFUL WIRELESS BACKHAULING

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

LOW LATENCY AND HIGHER RELIABILITY
Compared to 802.11 WI-FI radios

SUPPORTS FLUIDITY
Broadband connection to
high speed vehicles

PICK YOUR OWN ANTENNA

FAST INSTALLATION

MULTI FREQUENCY
2.3, 2.4, 3.3-3.7, 4.9, 5.1-5.8,5.9-6.0 GHz**

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RADIO

Range	Depends on the antenna
Frequency Bands	2.3, 2.4, 3.3-3.7, 4.9-5.9 GHz
Radio Connectors	2 RP-SMA Connectors
Throughput	Up to 100 Mbps
Modulation	Up to 300Mbps
Transmission Power	Up to 27 dBm, depending on configuration and regulations
Receiving Sensitivity	-96dB@6.5 Mbps; -70dB@300Mbps;
Latency per hop	< 0.3 ms
Antenna Type	-
Antenna Gain	-
Polarization	-
Cross-pol Isolation	-
Max VSWR	-
Horizontal Beamwidth Coverage	-
Vertical Beamwidth Coverage	-

ENVIRONMENTAL

Power Consumption	Max 8W
Operating Temperature	-40C to 80C -40F to 176F
Humidity	95% condensing
Weather Rating	IP65
Wind Survivability	120Mph /193km
Shock & Vibration	ETSI 300 – 019 - 1.4
Wind Loading@125Mph/200Kmh	<25lb/11kg

ELECTRICAL

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

OPTIONAL SOFTWARE PLUG-INS

Ethernet Capacity Plug in up to 10 Mbps	Included
Ethernet Capacity Plug in up to 30 Mbps	Yes
Ethernet Capacity Plug in up to 60 Mbps	Yes
Ethernet Capacity Plug in up to 100 Mbps	Yes
Fluidity Plugin	Yes
802.1Q VLAN Support Plugin	Yes
AES – 128 bit Link Level Encryption Plugin	Yes
AES – 256 bit Link Level Encryption Plugin	Yes
Bazooka Plugin	Yes

SECURITY

VPN	Yes
AES-128 bit Link Level Encryption	Yes
AES–256 bit Link Level Encryption	Yes
Full compatibility with AES, 3DES, RSA, HTTPS, SSL	Yes

PHYSICAL

Interfaces	1 Internal RJ45 Port. Shielded CAT5/6 cables and connectors are recommended.
Coupling	PG9 metal cable gland
Dimensions (mm)	180(h)x84(w)x37(d)
Weight	0.5Kg / 1.1lb

COMMUNICATION PROTOCOLS

Prodigy 1.0 and 2.0	Yes
Wi – Fi 802.11n	Servicing only

NETWORK

Protocols	UDP, 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

APPROVALS

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

SUPPLIED ACCESSORIES

POE Injector 24VDC with US/EU/UK cord	Yes

WARRANTY

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

SUPPORTED ARCHITECTURES

POINT TO POINT	POINT TO MULTIPOINT	MESH	MIXED	MOBILITY

IMPORTANT:
FM3100 ENDO is available only for Fluidmesh Networks pre-approved applications.

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

FLUIDMESH
NETWORKS
A CARRICK BEND COMPANY