



Mesh Wide Area Networks

Personal Video Encoder

Portable Wireless Camera and Real-Time Video Surveillance



A Total End-to-End Solution

Motorola's comprehensive portfolio of reliable and cost-effective wireless broadband solutions together with our WLAN solutions provide and extend coverage both indoors and outdoors. The Motorola Wireless Broadband portfolio offers high-speed Point-to-Point, Point-to-Multipoint, Mesh, Wi-Fi and WiMAX networks that support data, voice and video communications, enabling a broad range of fixed and mobile applications for public and private systems. With Motorola's innovative software solutions, customers can design, deploy and manage a broadband network, maximizing uptime and reliability while lowering installation costs.

Motorola's wireless mesh broadband technology delivers an instantly deployable, mobile video network. The solution integrates Motorola's unique Mobility Enabled Access (MEA) technology or WiFi technology directly into the Personal Video Encoder (PVE) from Darim. The personal video encoder can be part of a larger MOTOMESH Solo (6300 series), Duo (4300 series) or Quattro (7300 series) network, or act as a stand alone video and monitoring solution.

Self-Forming Wireless Video Network

Motorola's intelligent MEA technology turns each PVE into a router/repeater that strengthens a seamless, wireless network. This network can be deployed independently, or as part of a wider network using additional mesh devices. Video and other broadband data can "hop" through every device in the network. With this Multi-Hopping feature, the network becomes more robust as additional PVEs and other mesh devices are added.

Wireless Connectivity

Motorola supports two variants of the personal video encoder. The PVE400 supports a built-in 802.11b/g capability for standards based WiFi network integration, operating in a MOTOMESH Duo network, while the PVE400M uses MEA 2.4 GHz wireless technology, supported in MOTOMESH Solo and Quattro networks.

On-board Recording

With an 8 MB compact flash card, the 2.4 GHz WiFi version of the PVE400 can support video recording. The device is able to record up to 16 continuous hours of video. Now a user can simply turn the unit on and record a full day's worth of Point of View video. Then a user can easily copy the video files at the end of the day either using an Ethernet cable or over a WiFi link.

Quick Deployment of Video Surveillance

The integrated design, lightweight form factor (weighing less than two pounds) and instant scalability of the mesh wireless system also provides an ideal solution for quick,

temporary deployments at events that require personal video surveillance and monitoring. Since the MOTOMESH Solo network self-forms when the PVE 400M is powered up, video monitoring can be instantly deployed to improve situational awareness and incident response. MEA technology offers the ability to quickly scale up the network by simply adding PVE 400Ms, clients or other mesh devices to expand coverage.

Management and Control

The PVE can be managed and monitored from an incident response command post or a central operations control center and delivers real-time video and audio information for true "Point-of-View" situational awareness. Access can be offered through a simple web browser, or for multiple units management is supported through the Darim VideoSpider console. VideoSpider informs the PVEs when bandwidth is scarce resulting in reduced frame rates and optimization of the network's resources.

A Robust Solution

This portable solution can withstand the most challenging environments with the support of field-operational features such as Fischer auto-locking/quick-release interfaces, aluminium encasement, waterproof head-camera and field-replaceable lithium-ion rechargeable battery, specifically designed to meet the needs of harsh operating conditions or critical/emergency response teams.

Monitoring for Staff Safety

The PVE also includes an integrated Ethernet port offering local attachment for additional devices, from data terminals to personal monitoring devices for public safety, security personnel and emergency response staff. With wireless connectivity, users can access intranet applications or emergency workers can automatically send key biometrics status reports.

SPEC SHEET

Portable Video Encoder

PERSONAL VIDEO ENCODER FEATURES

- Real-time hardware MPEG4 Video and G.711 audio compression
- Personal wireless router for locally attached Ethernet devices
- Support of Motorola's Mobility Enhanced Access (MEA) in 2.4 GHz (PVE400M)
- Support of 802.11b/g for standards based Wi-Fi network integration (PVE400)
- Wireless communication with control center
- Integrated "Bullet head-camera" or generic video camera cable options
- Individual web interface capability
- 12V output for camera power feed
- 3 to 5 hours operating time on single "field-replaceable," rechargeable battery
- Multi-device management from Darim's VideoSpider Console

PERSONAL VIDEO ENCODER CHARACTERISTICS

Video Input	Composite, NTSC/PAL
Audio Input	Microphone level, Mono
Compression	Video (MPEG4 SP/ASP), Audio (G711 - 8kHz sample rate)
Resolution	NTSC: 720x480, 320x240, PAL: 720x576, 352x288;
Frame Rate	Selectable: NTSC: 1-30 fps and PAL: 1-25 fps
Bit Rate	128 Kbps - 3 Mbps
Interfaces	Ethernet 10/100, RS232. WiFi 802.11b/g with WEP security (PVE400) MOTOMESH WMC6300 (PVE400M)

COMMUNICATION

Protocols	RTSP/RTP, HTTP, DHCP, Telnet
Antenna	RP-SMA jack, 2.4 antenna

POWER

Indicators	On/Off - green, Battery Life - Green/Yellow/Red
Battery	Lithium Ion 3.6V, 6.8 Ah. rechargeable, field-replaceable
Operation Time	3-5 hours, depending on camera equipment attached
Charging	AC power supply unit included with PVE

PHYSICAL

Dimensions	134mm x 113mm x 37mm (5.3" x 4.45" x 1.16")
Weight	0.75kg (1.65 lbs)

ENVIRONMENTAL & REGULATORY

Operating Temperature	-20 to 60 °C (-4 to 140 °F)
Humidity	0 to 95%, non-condensing at 50 °C (122 °F)
Approvals	FCC/SAR, CE and RoHS compliant

AVAILABLE OPTIONS & ACCESSORIES

Battery Charger	Range of 1, 2, 6 or gang battery chargers available
Bullet Camera	1/3" Sony Ex-View HAD CCD, hi-res. 480TVL with 1.2m cable with Fischer 5 pin connector
Video/Audio & Power Cable	Split camera Fischer 5 pin to Video (Composite, RCA female), Audio (Mono, 3.5mm phono jack), 12V • 150mA max, 2.1mm DC Jack
Auxiliary Cable	Ethernet , (10/100 RJ45 jack cabled to Fischer Quick Connect - 10 pin)
Holster	Nylon holster with shoulder straps



MOTOROLA

Motorola, Inc. www.motorola.com/mesh



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