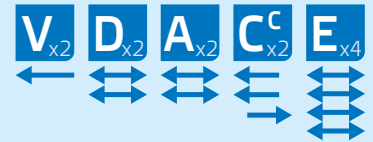


Two Channel Video Processor

MPH is the next generation high performance H.264 network video product encoding video in unmatched quality in mission critical applications for customers in rail, road, airport, city center monitoring and corporate security.



-34...+74 °C

H.264
MPEG-4
MJPEG
MPEG-2



MPH242 can deliver up to two independent video streams per video input at full frame rate and full SD resolution using H.264, MPEG-2, MPEG-4 or MJPEG, or a higher number of lower resolution streams. This allows security professionals to optimise each of the individual streams for its purpose, e.g. live viewing, recording, web applications, PDA etc. It also ensures safe and seamless migration path from any legacy hybrid video network towards fully H.264 based network.

The video stream can be accompanied with synchronised audio stream. The video streams can be decoded by standards compliant media players and video decoder devices. The stream authenticity is an integral part of the solution fulfilling the most stringent requirements for evidential material set by authorities.

The built-in EIA RS data channels provide multi-vendor PTZ camera control through Ethernet network. The alarm inputs and output can be used to trigger events and control external devices.

MPH provides direct copper and fibre connectivity to Fast/Gigabit Ethernet networks through a built-in Ethernet switch. The use of SFP plug-in optics makes it suitable for deployment in a wide range of optical networks.

In addition to Command Line Interface (CLI) and comprehensive Web user interface, MPH speaks ONVIF fluently. This provides straight forward interoperability with any ONVIF compliant management system. Integration to third party systems can also be achieved using RTSP, SAP or SNMP.

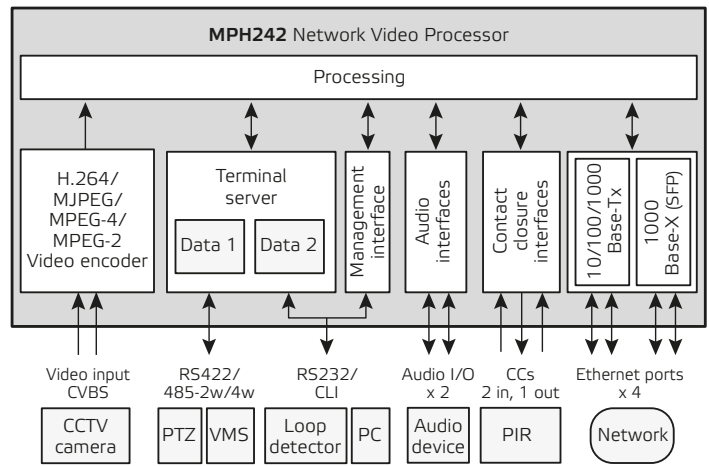
Reliability is the second name of the platform. Low cost of ownership is guaranteed by the industry leading figures in terms of power consumption per functionality as well as the mechanical design which is custom made to fit the high performance criteria in harsh environment. MPH meets the compliance requirements of EN50121 Railway standard as well as NEMA TS2 standard widely used for ITS applications.

MPH is the industry leader in video encoding for surveillance applications. It gives you the touch and feel of traditional analogue systems while providing the flexibility and manageability provided by today's Ethernet networks.

Features

- QCIF to D1 resolution at 25/30 fps
- Simultaneous H.264, MPEG-4, MPEG-2 and MJPEG encoding
- Quad streaming to full D1
- Low video latency
- Support for transparent data tunnelling and ONVIF PTZ service
- Alarm inputs and relay output
- Built-in video analytics
- Built-in Gigabit Ethernet switch
- Video signature for content authentication
- Text overlay
- Privacy masking
- Industrial design for -34 ...+74°C operating temperature
- Support for ONVIF and SNMP management interface
- Support for WebUI and CLI user interface
- Support for SFP
- Optional support for PoE

Block diagram



Technical specifications *(Typical values unless otherwise stated, * = define when ordering, ** = optional, *** = ordered separately)*

Video		Number of ports	4 full duplex	2 electrical & 2 SFP slot *
Number of inputs	2 PAL/NTSC	Speed	1000 Mbps	
Nominal level	1.0 Vpp	Gigabit Ethernet	10/100/1000BASE-T 1000BASE-X	electrical SFP ***
Input impedance	75 ohms	Ethernet connector	RJ-45 female LC	electrical optical
Number of encoding profiles	6	Ethernet Protocols		
Number of output streams	4 per profile	Video/Data Management Generic		
Encoding ¹⁾	ISO/IEC 14496-10 RFC 2435 ISO/IEC 14496-2 ISO/IEC 13818	RTP, UDP, TCP, IP, SAP, RTSP SNMP **, HTTP, DHCP, SSH, Telnet DHCP, DNS, ZeroConf, ICMP, IGMpv2, ARP, NTP, QoS		
Resolution	½D1, D1	SFP Transceivers ***		
	QCIF, CIF, 2CIF, 4CIF	See separate document "Product Specification / SFP Transceivers"		
Frame rate (fps)	1...25 PAL, 1...30 NTSC 25 PAL, 30 NTSC	Management		
Output bit rate (adjustable)	64 kbps...8 Mbps	WebUI Local via Ethernet port, remote via network CLI Via telnet, SSH or local RS232		
Latency	< 150 ms	SNMP ** Remote via network ²⁾ ONVIF Industry standard ONVIF protocol ²⁾		
Video pre processing	motion adaptive deinterlace, freely scaled antialiased true type text overlay, privacy zone masking	Diagnostics SNMP ** or ONVIF Software update Local or remote via CLI, WebUI or ONVIF		
Video content analytics (VCA)	tampering detection, motion detection	General		
Video authentication	cryptographic signatures (RSA)	Supply voltage 10.5...28 V DC Power Over Ethernet Plus support (PoE+, 802.3at) **		
Video connector	BNC female CVBS & HD video	Power consumption 13 W PSU connector 2-pin removable screw terminal		
Data		Dimensions (H x W x D) 52.5 x 130 x 254 mm (2.1 x 5.1 x 10") without BNC conn. Weight 1.9 kg (4.19 lbs)		
Number of channels	2 bi-directional	Mounting options Wall mounting, DIN rail ***		
Data 1 standard	RS422/485	Operating temperature -34...+74 °C (-29...+165 °F) temperature hardened Storage temperature -40...+80 °C (-40...+176 °F)		
Data 2 standard	RS232	MTBF > 100.000 hours HRD5		
Bit rate	0.6...230.4 kbps	Approvals CE, FCC EMC EN 50130-4, EN 50121-4, EN 61000-6-3, FCC 47 part 15 Environmental IEC/EN 60068 series cold, Dry heat, Vibration, Shock test, Transport bump, Damp heat and Random vibration, NEMA TS 2-2003		
Format	asynchronous	Additional Features and Services ***		
ONVIF PTZ service	Pelco D, Pelco D Extended	MLH251 Support for PoE MLH322 MPEG-2 encoding licence for 2 channel MPH MLH332 MPEG-4 encoding licence for 2 channel MPH MLH341 AAC-HE audio codec licence MLH351 Encryption licence (future option) MLH261 Support for local storage (future option) MLH371 Support for SNMP configuration interface MSH001 Configuration Service MSH271 Extended Warranty		
Transport	TCP/IP unicast or UDP/IP multicast	Accessories ***		
Data connector	removable screw terminal	CPS250/251/252/253 CIC506	Power supply Management cable	12 VDC 3.3 A D9F/8-pin screw terminal
Audio		Notes		
Number of channels	2 bi-directional	¹⁾ H.264 and MJPEG are default encoding engines. MPEG-2 and MPEG-4 are add-on options ²⁾ The unit can support only one of the ONVIF or SNMP at a time		
Nominal level	0.707 V _{rms} 1.414 V _{rms}			
Impedance	10 kohm / 600 ohm 50 ohm / 10 ohm			
Coding	ITU G.711 ITU G.726 AAC-LC			
Sampling rate	8, 16, 32, 44.1, 48 kHz			
Transport	RTP/UDP/IP TS/UDP/IP			
Connector	removable screw terminal			
Contact Closure				
Number of channels	2 inputs / 1 output			
Input dry contact	on/off			
current loop (opto isolated)	logical 0 (0...+1.4 VDC), logical 1 (+2.2...+30 VDC)			
Output relay	max. 30 VDC / 0.6 A			
Control delay	< 20 ms			
CC connector	removable screw terminal			
Ethernet Interfaces				