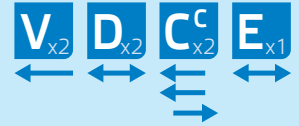


# Two Channel Video Processor

MPH is the next generation high performance H.264 network video product encoding real time 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



MPH102 and MPH112 can deliver two independent video streams per video input at full frame rate and full resolution (SD) using H.264, MPEG-2, MPEG-4 or MJPEG, or any combination of these. 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 full breed H.264 based network.

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 or fibre connectivity to Fast/Gigabit Ethernet networks. 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.

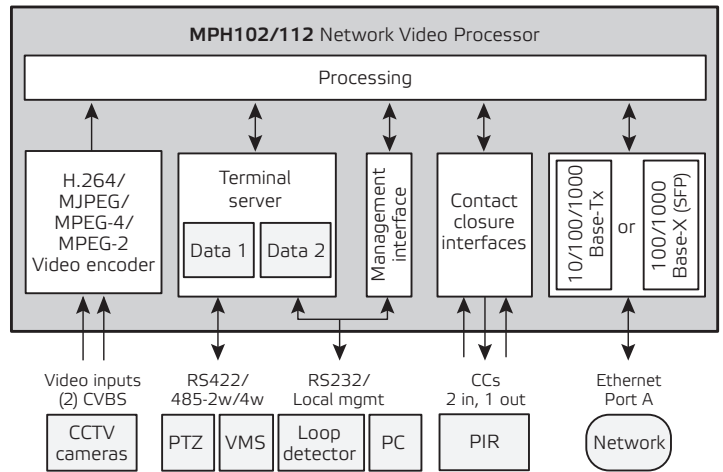
Reliability is the second name of the platform. Low cost of ownership is guaranteed by the industry leading figures in terms of power consumption per functionality as well as the mechanical design which is custom made to fit the high performance criteria in harsh environment. MPH meets the compliance 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 SDTV resolution at 25/30 fps
- Low video latency
- Simultaneous H.264, MPEG-4, MPEG-2 and MJPEG encoding
- Dual streaming to full D1 per video input
- Support for transparent data tunnelling and ONVIF PTZ service
- Alarm inputs and relay output
- Built-in video analytics
- 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		Ethernet Protocols	
Number of inputs	2 PAL/NTSC	Video/Data	RTP, UDP, TCP, IP, SAP, RTSP
Nominal level	1.0 Vpp	Management	SNMP **, HTTP, DHCP, SSH, Telnet
Input impedance	75 ohms	Generic	DHCP, DNS, ZeroConf, ICMP, IGMPv3, ARP, NTP, QoS
Number of encoding profiles	8	<b>SFP Transceivers ***</b>	
Number of output streams	4 per profile	See separate document "Product Specification / SFP Transceivers"	
Encoding <sup>1)</sup>	ISO/IEC 14496-10 RFC 2435 ISO/IEC 14496-2 ISO/IEC 13818	<b>Management</b>	
Resolution	½D1, D1	WebUI	Local via Ethernet port, remote via network
	QCIF, CIF, 2CIF, 4CIF	CLI	Via telnet, SSH or local RS232
Frame rate (fps)	1...25 PAL, 1...30 NTSC	SNMP **	Remote via network <sup>2)</sup>
	25 PAL, 30 NTSC	ONVIF	Industry standard ONVIF protocol <sup>2)</sup>
Output bit rate (adjustable)	64 kbps...8 Mbps	Diagnostics	SNMP ** or ONVIF
Latency	< 120 ms	Software update	Local or remote via CLI, WebUI or ONVIF
Video pre processing	motion adaptive deinterlace, freely scaled antialiased truetype text overlay, privacy zone masking	<b>General</b>	
Video content analytics (VCA)	tampering detection, motion detection	Supply voltage	10.5...28 V DC Power Over Ethernet Plus support (PoE+, 802.11at) **
Video authentication	cryptographic signatures (RSA)	Power consumption	4 W
Video connector	BNC female CVBS video	PSU connector	2-pin removable screw terminal
<b>Data</b>		Dimensions (H x W x D)	41 x 129 x 166.5 mm (1.6 x 5.1 x 6.6")
Number of channels	2	Weight	1.0 kg (2.2 lbs)
Data 1 standard	RS422/485	Mounting options	Wall mounting, DIN rail ***
Data 2 standard	RS232	Operating temperature	-34...+74 °C (-29...+165 °F) temperature hardened
Bit rate	0.6...230.4 kbps	Storage temperature	-40...+80 °C (-40...+176 °F)
Format	asynchronous	Approvals	CE, FCC
ONVIF PTZ service	Pelco D, Pelco D Extended	EMC	EN 50130-4, EN 50121-4, EN 61000-6-3, FCC 47 part 15
Transport	TCP/IP unicast or UDP/IP multicast	Environmental	IEC/EN 60068 series Cold, Dry heat, Vibration, Shock, Dump, Dump heat and Random Vibration, NEMA TS 2-2003
Data connector	removable terminal	<b>Ordering Code</b>	
<b>Contact Closure</b>		MPH102	2 Ch H.264/MJPEG Encoder, Fast Ethernet, RJ-45
Number of channels	2 inputs / 1 output	MPH112	2 Ch H.264/MJPEG Encoder, Fast Ethernet, SFP support
<b>Input</b>		<b>Additional Features and Services ***</b>	
dry contact	on/off	MLH241	Network interface upgrade to Gigabit Ethernet
current loop (opto isolated)	logical 0 (0...+1.4 VDC), logical 1 (+2.2...+30 VDC)	MLH251	Support for PoE
<b>Output</b>		MLH321	MPEG-2 encoding licence for 1 Channel MPH
relay	max. 30 VDC / 0.6 A	MLH331	MPEG-4 encoding licence for 1 Channel MPH
Control delay	< 20 ms	MLH371	Support for SNMP configuration interface
CC connector	removable terminal	MSH001	Configuration Service
<b>Ethernet Interface</b>		MSH271	Extended Warranty
Number of ports	1 full duplex (port A)	MSH380	SLA
Speed	100Mbps / 1000Mbps **	<b>Accessories ***</b>	
Fast Ethernet	10/100BASE-TX 100BASE-FX	CPS250/251/252/253	Power supply
Gigabit Ethernet **	10/100/1000BASE-T 1000BASE-X	CIC506	Management cable
Ethernet connector	RJ-45 female LC	MAC003	DIN Rail mounting kit
	electrical or SFP slot *	<b>Notes</b>	
	fixed SFP ***, with SGMII mode	<sup>1)</sup> H.264 and MJPEG are default encoding engines. MPEG-2 and MPEG-4 are add-on options	
	fixed SFP **	<sup>2)</sup> The unit can support either SNMP or ONVIF interface, but not both simultaneously	
	electrical optical	Copyright © TELESTE CORPORATION. We reserve the right to make changes without prior notice.	