

Digital hybrid recorder MR3180

video solutions



Description

Digital hybrid recorder to record up to 8 analogue and 8 IP-network cameras. Especially designed for use in buses, trains and other vehicles.

Article number

- VPV 200054

Main Features

- video recording: 8 x analogue, 8 x IP cameras
- 2-channel audio recording
- Event protocol, IBIS, GPS
- maintenance-free operation by fanless design
- e1, EN 50155, CE, RoHS, VDS
- multi-level security concept

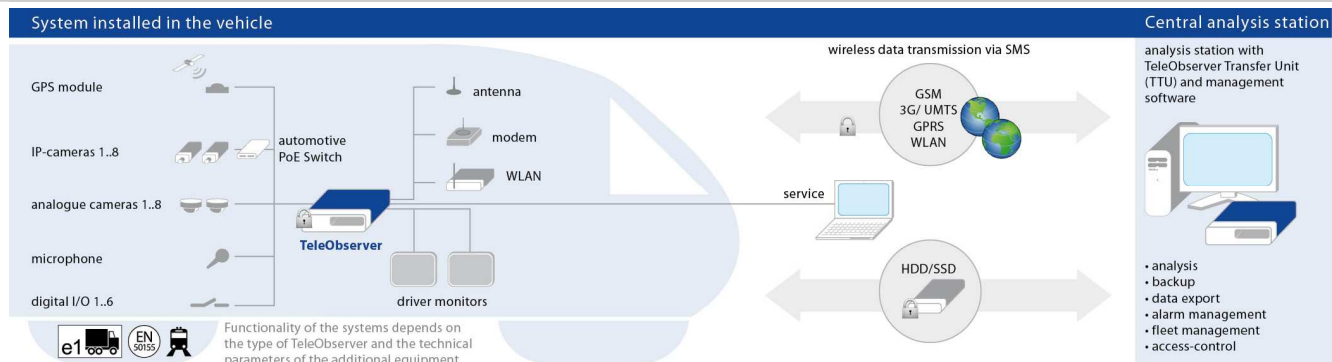
Specified use

- Hybrid recorder for recording video data from up to 8 cameras, audio- and additional data. Especially for use in buses, trains and other vehicles, e1 and EN 50155 certificated.
- 8 x video-In analogue cameras, 8 x video-In for AXIS network cameras (up to 1280 x 1024 pixel)
- 2-channel audio recording (e.g. for the documentation of the driver communication)
- Removable media HDD/ SSD up to 250 GB
- 2 x video-OUT (for up to 12 digital network cameras), split screen representation & video forwarding
- Recording of additional data such as IBIS (VDV 300), GPS, system event protocol
- Interfaces: RS 232, RS 485, 3 x Ethernet 100 Mbit (2 x RJ45, 1 x M12)
- 8 digital alarm-inputs and 2 outputs for switch-relays (differential), logically combinable detectors
- 'Pause' mode to start and stop recording, 'Standby mode'
- Compact, robust industrial design for use under difficult conditions, (vibration protection, maintenance free by fanless operation, dust protected, without ventilation slots)

Software and data management

- Live-video-images, search- and playback-function and rapid video-download via an Ethernet interface
- Configuration and management software with ergonomic graphic user interface
- Extended event und information management (additional data IBIS, GPS)
- Support for alarm and fleets management
- Data encryption, watermark, sabotage detection, role based access control, motion detection
- Flash based realtime operating system
- MJPEG and H.264 (MPEG-4 AVC) compression with recording of up to 200 frames per second
- SMS support in case of alarms and for maintenance/service (via external GSM-modem)

Installation scenario



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Video-IN	8 x analogue composite (BNC); 8 x digital (through external switch); possibility to configure 4 further digital cameras for the video-OUT; record of 8 cameras in total
Video-OUT	2 x composite video (BNC); PAL/NTSC video outputs for single-, quad- or sequential view of all analogue and digital cameras (display of up to 12 IP-cameras)
IP-video compatibility	Axis-cameras from firmware version 4.15, Mobotix and others
Recording format	200 fps (QVGA/CIF), ca. 50 fps (VGA/4CIF); resolution up to 1280 x 1024 Pixel for IP cameras
Recording time & memory	24/7 permanent, terminated, manual and event-driven; recording of IBIS- and GPS-data (external GPS-receiver); removable media with vibration protection HDD/SSD up to 250 GB
Compression	MPEG-4 AVC (H.264+); MJPEG
Audio	2-channel-audio recording, uncompressed
Security features	HD-Lock, watermark, signature of recording data, sabotage and motion detection; configurable lead & follow-up times for the system and alarm recording
Supported protocols	RS232, RS485, HTTP, NMEA, NTP, Syslog
Connectors:	Input: 8 x (low: 0-3 V, high: 6-34 V); output: 2 x relay (max. 60 V DC, 125 V AC, 500 mA), differentially (optocoupler)
- Digital I/O	
- Ignition contact	Differentially (low: 0-3 V, high: 6-34 V)
- Serial Interfaces	2 x RS232 D-Sub-9-connector (male); RS485 D-Sub-25-connector (male), IBIS D-Sub-25-connector (male)
- Ethernet	2 x 10/100 Mbit, RJ45 interface; 1 x 10/100 Mbit M12 interface
Synchronization	Date/time of the network cameras will be synchronized by the system (integrated NTP-server); system can be synchronized by the IBIS-bus of the vehicle or via GPS
Power supply	System power: 12 – 32 V DC; power supply of external devices: 12 V DC / 2,5 A; power supply of the digital network cameras via external PoE-switch
Power consumption	Standby mode: < 1 W; pause mode: < 22 W; recording without cameras: max. 22 W; recording inc. cameras: max. 55 W
Temperature range	Operating temperature: 0 °C ... + 70 °C (depends on the type of disk); humidity: 10 – 90 % not condensing
System parameter	Flash based realtime operating system, CPU: 2 x TriMedia
Supported languages	German, English, Italian
Installation, service and maintenance	Service & configuration through CMS-software, update via Ethernet and web-interface, widely maintenance-free by fanless design, easy data analysis and system updates
Data analysis	Using CMS module ImageFinder and/or USB-TTU and software ImageFinder NX (only in conjunction with USB-TTU usable)
Delivery content	System, product CD with configuration- and management software CMS, documentation and firmware
Available accessories	19"chassis for build-in installation with terminal block (pre-wired), GPS-receiver, GPIO-tester, removable disk HDD/SSD up to 250 GB, various cable kits, WLAN-modules, PoE-switches
Certifications	e1, EN 50155, CE, RoHS, VDE, DIN 5510, EN 55022, EN 61000, EN 55024, EN 60950
Housing, dimensions & weight	Robust industrial design, stainless aluminium housing, fanless, IP 42, external dimensions (W x H x D): 238 x 132 x 251 mm, weight: appr. 4400 g

Information refer to the current state and may be subject to unannounced changes.