Hydra^{IP} MR4840

Description

Digital 8–channel hybrid recorder of the HydraIP series for the recording of analog and digital camera signals. Specially designed and certified for mobile use in road and railway vehicles.

Article number

MR4840   DRV110222
MR4840 4G WLAN   DRV110225

Main features

- Complete integration into vehicle systems
- Fast & easy installation
- Compliant with IBIS VDV300 and IBIS VDV301 (IBIS over IP)
- Robustes housing, fanless and no ventilation slots
- Eletronic key for storage media removal (HydraIP SmartKey)
- Data security by multilayer security concept (HydraIP SmartLock)
- GPS module included (GNSS GPS–NAVSTAR)
- Recording of additional data (audio, event data, IBIS...)
- Optional transmission module (LTE/4G/3G/WLAN) available
- Expendable with automatic people counting and fleet management system
- Automatic position detection in linked systems

System	Multi processor system with automatic self-monitoring (temperature, error statuses) UNIX operating system Internal real time clock (RTC) The power supply of the storage media is buffered with Super caps FW–Updates and configuration by direct connection or USB stick Integrated web interface (HydraIP ServiceTool) for configuration, system diagnostic and data download
Recording	Flexible definition of ring and alarm recording Automatic deletion of data according to FIFO principle Recording time of up to 30 days (depending on the individual settings of the system and capacity of the storage media) Analog Video: Up to 100fps (4 CIF) Supported resolutions: CIF (352x288), 2CIF (720 x 288), 4CIF (704 x 576) Video compression: H.264 Digital Video (IP): Video compression: H.264 Additional data: Audio, IBIS VDV300, IBIS VDV301 (IBIS over IP), event data (System state, Diagnostic data.), GPS data, CAN–FMS, acceleration data of internsl acceleration sensor
Interlocking System & Data Security	Electromechanical locking of storage media for protection against unauthorised or premature removal of the storage media. Removal of the storage media by an electronic key (HydraIP SmartKey). Removal of the storage media is not possible before writing– and reading–processes have stopped. Loss of data or damage of storage media in cause of premature removal is avoided. Removal of the storage media from currentless system possible. To analyse the recorded video data, the analysis station USB–TTU and the Derovis analysis software application ImageFinder NX is required. All data are recorded in special data format and are not readable in any other system. For giveaway of the encrypted data a special player software ImageFinder NX Player is available. Possibility of four–eyes principle for inspection of video data with ImageFinder NX (according to data security standards).

Video output	2 x PAL (720 x 576 px) Single and multiview of all camera signals. Freely configurable manual, automatic or event controlled screen switching
Interfaces	8 x Video In (CVBS, BNC) 2 x Video Out (CVBS, BNC) 1 x USB 2.0 service interface 4 x Ethernet (100 Mbit/s, M12 D-coded) 1 x GPS NAVSTAR (FAKRA type C, blue) Phantom power 3,6 VDC 4 x color LED for signalization of system statuses 2 x Audio (5kOhm, max 2Vpp) 9 x Digital In (GPI) (2x with internal switching voltage) 2 x Digital Out (GPO) (changeover (relay), contacts: max. 60 VDC, 125 VAC, 500 mA) 1 x Stabilized power supply for external devices (12 VDC / 2 A) 1 x IBIS VDV300 1 x CAN-FMS 1 x USB 2.0 1 x Ignition signal: (low: 0—3 VDC, high: 6—34 VDC) 1 x Interface for external devices MR4840 4G WLAN: 1 x LTE/4G/3G (FAKRA type D, bordeaux) 1 x WLAN (FAKRA type I, beige)
Integration	Compliant to VDV300 IBIS, IBIS VDV301 (IBIS-IP) Automatic answers to IBIS status checks Remote control by network API Control by General Purpose Input (GPI) Signalling of system states by General Purpose Output (GPO) Integration into Derovis fleet management system
Power supply	System power: 24 VDC (9 ... 32 VDC) Minimal power consumption (protection of the vehicle battery) Operational modes: SleepMode < 1 W, StandbyMode < 5 W, Recording Mode max. 12 W, with external devices max. 40 W
Environment	Operating temperature: -25°C ... +70°C EN 50155 Class T3 Storage temperature: -40°C ... +85°C Humidity: 95 % (not condensing), Active temperature management
Housing	Robust aluminum housing with cooling profile for passive cooling Fanless, no ventilation siots Protection class: IP42 integrated DIN rail and & screw channel Easy and fast installation with Derovis mounting panel Dimensions (W x H x D): 160 x 84 x 208 mm Weight: approx. 1900 g (without storage media), approx. 2100 g (with storage media)
Accessories	Storage media HydraIP HD3800 (500 GB / 500 GB railway / 1TB / 2TB) Mounting bracket Electronic key HydraIP SmartKey HK3900 External module HydraIP GPIO4210 (10 x General Purpose Input (GPI) and 2 x General Purpose Output (GPO)) External module HydraIP KM4111 (for WLAN, 4G, GPS) Ethernet Switch HydraIP ESW1820 (10 x M12 D-coded Ethernet interfaces) Analysis station HydraIP USB-TTU 3
Conformities & Certification	RoHS, REACH, VDE, UN ECE R10 (E1), UN ECE R118, EN 50155, EN 61373, EN 50121-3-2, EN 50155, EN 45545-2, IEC 60068-2, EN 55022 (CE), EN 55024 (CE)

Information refers to the current states and may be subject to unannounced changes.   11.08.2016

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