

FIRMUS Lite

Mobile/Ruggedized Digital Video Recorder

Product Overview

- CIF to 4CIF Resolution**
- 30 frames per second recording on all Channels (up to 120fps)
- 1 Internal Hard Drives
- Embedded Operating System for high stability
- Optional GPS

The **FIRMUS Lite** Embedded Mobile DVR with 1, 2 or 4 channel options using the industries leading compression, H.264. Power input of 8-32VDC. High vibration resistance with special vibration control technology. All 4 models support 1 internal SATA HDD up to the industries largest capacity. Optional external SATA HDD available to increase the storage capacity.

H.264 provides the industries highest video quality with the smallest file sizes. With a 750 GB hard drive installed, approx.

80 hours of DVD quality video can be captured in full motion with audio. If the recording rate is lowered to systems lowest and slowest setting, that same HDD will store 5,000 hours. GPS and Schedule shut down functions are available.

Front View



Rear View



MODEL SPECIFICATIONS / CAPABILITIES

FirmusL-01:

1-ch video input and 1-ch audio input, support 4CIF, up to 30fps.

FirmusL-02:

2-ch video input and 2-ch audio input. The 1st channel can support DCIF, up to 30 fps. 2nd channel can support CIF, up to 30fps.

FirmusL-04:

4-ch video input and 4-ch audio input. All channels can support CIF, up to 30 fps.

FirmusL-04H:

4-ch video input and 4-ch audio input. All channels can support 4CIF, up to 30 fps.

Compression

- Supports 4 channels video input (PAL/NTSC) at most. Each channel is independent, H.264 hardware compression and real time (PAL: 25 FPS, NTSC: 30FPS). Supports both variable bitrate and variable frame rate
- Supports 4 channels audio input at most. Each channel is independent, OggVorbis compression and bitrate is 16Kbps (MP3 quality)
- Compressed video and audio are synchronous. You can select either mixed stream or only video stream
- Supports multi area motion detection
- Supports OSD and changeable OSD position
- Supports LOGO and changeable LOGO position

Record

- Supports multiple record types, including real time, manual record, motion detection, external alarm, motion & alarm, motion | alarm
- Supports 1 internal SATA HDDs and external HDD of 2000GB maximum
- Supports FAT32 file system
- Supports HDD S.M.A.R.T technology
- Supports cycle or none cycle recording
- Supports backing up the recorded files and clips through USB memory, USB HDD, USB CD-R/W, USB DVD-R/W and E-SATA HDD

Preview and Playback

- Supports TNC analog monitor and VGA output for main monitor connection
- Supports multiple preview modes
- Supports sensitive area masking
- Supports spiteful camera block alarm
- Supports 2-ch synchronous playback and play forward, backward, pause, frame by frame, etc...
- Supports play back by files or by time
- Displays local record status

PTZ

- Supports many kinds of PTZ protocols
- Supports preset, sequence and cruises

Alarms

- Supports exception alarm, motion detection alarm, external alarm, etc...

Others

- Supports IR control
- Supports RS-485 keyboard
- Supports multi-level user management

Network

- Supports TCP, UDP, RTP, Multicast for network preview
- Supports PPPoE for board band dialup
- Supports PSTN for narrow band dialup
- Supports remote parameters setup
- Alarm information can be sent to remote center
- Network control PTZ
- Network recording the real time streaming
- Network download and playback of the recorded files in from the DVR
- Remote upgrading of the firmware
- RS-232 supports transparent channel function so that the remote PC can use the DVR to control serial devices
- Supports bi-direction voice talk or one-way voice broadcasting
- Supports IE to preview and configure DVR
- Supports logging

Specifications

- Video Compression: H.264
- Preview Resolution: NTSC: 704x480 (4CIF,D1) / PAL: 704 x 576 (4CIF,D1)
- Video Input: 1/2/4 channels BNC (1.0Vp-p, 75 Ohm)
- Composite video output: 1 Channel BNC (1.0Vp-p, 75 Ohm)
- Frame Rate: NTSC: 1/16-30 FPS / PAL: 1/16 – 25 FPS
- Stream type: Video Stream or Video & Audio Stream
- Bit rate: 32kbps – 2Mbps (Self Definition)
- Audio input: 1/2/4 channels BNC (2.0Vp-p, 1K Ohm)
- Audio output: 1 x channel BNC (linear output, 600 Ohm)
- Audio compression: Ogg Vorbis, 16kbps
- Audio Interface: 1 x BNC (linear in, 1K Ohm)
- Network interface: RJ45 10M/100M UTP
- RS232 Interface: 1 x GPS module
- HDD interface: 1 x 3.5" SATA interface
- Max HDD support: 2000GB
- Back-up interface: 1 x ESATA interface for high speed back-up
- USB interface: 1 x USB 1.1
- VGA interface: 1
- External alarm inputs: 4
- Relay output: 2
- Power input: DC+12V (working range is 8V~28V) or DC +24V (working range is 10V~32V)
- Power output: 1 x DC +12V/2A output
- Power consumption: 26W (without HDD)
- Working Temperature: -20C ~ +65C
- Working humidity: 10% ~ 90%
- Dimensions: 290mm x 225mm x 90mm (11.41" x 8.86" x 3.54")
- Weight: 5Kg (11lbs) (without HDD)
- EMC GB 13837-2003
- LCD support: 1 x external 5.5" or 7" color TFT LCD monitor