Digital Video Recorder

Core Software- Quick Operation and Setup

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DVR's
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SM-MAX404

4Ch. Standalone DVR with Full D1
Linux Operation System, H.264 Compression/AVI

D1 Digital Video Recorder

Key Features ------------------------------------
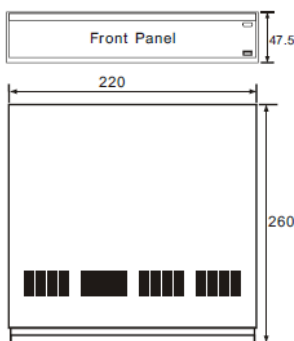
- ✓ H.264 Main Profile Video Compression Technology Highly Improves Video Quality for Live, Recording and Network.
- ✓ Real Pentaplex Operation Allows Live Display, Record, Playback, Backup and Network Operation at the Same Time.
- ✓ Dual Encoding Streams Support, D1/CIF/QCIF Resolution Programmable.
- ✓ Support VGA and BNC Output at the Same Time.
- ✓ Support Audio IN/OUT.
- ✓ Build-in IE Auto Active, Certificated by Microsoft, More Safety for PC.
- ✓ Support 1*SATA 2TB HDD, Strong Storage Capacity for Long Time Recording.
- ✓ 1, 4 Channel Playback Simultaneously.
- ✓ Support DDNS for Remote View.
- ✓ Support Sensor Alarm.
- ✓ Support PTZ control.
- ✓ Support Multi-languages.
- ✓ Support Snapshot
- ✓ Support SOMAX Keyboard
- ✓ Remote Access by Internet Explorer, ISS and VMS Server.
- ✓ Audio Talk Back through Internet.
- ✓ Mobile Surveillance Supported, Including iPhone, iPad, Android.
- ✓ Long Time Pre-record, up to 30 Seconds.
- ✓ Support Live View and Playback Digital Zoom.
- ✓ Support Digital Waterproof Video Data Protection.

Dimensions ------------------------------------

Technical Specification

Model NO.	SM-MAX404
OPERATION SYSTEM	LINUX
VIDEO	
VIDEO SYSTEM	NTSC/PAL Switch Selectable
INPUT	BNC*4,1.0Vp-p,75ohm
VIDEO OUTPUT	1 CH BNC(1.0Vp-p,75Ω); VGA Output
SPOT	NA
LOOP OUT	NA
VGA OUTPUT	800 x 600, 1024 x 768, 1280 x 1024
AUDIO	
INPUT	4CH , RCA
OUTPUT	1CH,RCA
TALK BACK	YES
CONTROL	
MOUSE	2*USB2.0
IR CONTROLLER	YES
KEYBOARD	YES
STORAGE	
BUILD IN INTERFACE	SATA 2.6 *1(1*HDD 2TB)
DISPLAY	
DIVISION	1, 4
ZOOM	Preview and Playback Zoom Support
RECORDING	
COMPRESSION	H.264 Main Profile
RECORDING MODE	Manual/Schedule/Motion Detection/Sensor
RESOLUTION	NTSC:704*480,352*240PAL :704*576,352*288
RECORD FRAME RATE	NTSC:120FPS@D1,120FPS@CIF PAL:100FPS@D1,100FPS@CIF (4CH D1)
QUALITY	Worst, Worse, General, Good, Better, Best
MOTION DETECTION	Sensitivity: Multi Level,22*15Grid
WATER MARK	YES
PLAYBACK	
PLAYBACK FRAME RATE(PAL)	120(100)FPS@D1 4CH D1
MULTI CHANNEL PLAYBACK	1 ,4
SPEED	Normal, FF(1X, 2X, 4X, 8X, 16X), Slow (1/2X, 1/4X), RW (8X, 16X, 32X)
SEARCH METHOD	Time, Event, Channels and Calendar
COMMUNICATION	
REMOTE SOFTWARE	IE Brower, Mobile, ISS
REMOTE OPERATION	Remote view, remote playback, remote setup
NETWORK SERVICE	TCP/IP,UDP,HTTP,DDNS,SMTP(SSL),LAN,DHCP,PPPOE, FTP, RTSP
MOBILE DEVICE	Iphone, Ipad, Android
3G EXTERNAL MODULE	NA
WAN RJ45	10/100Mbit/s
WIFI EXTERNAL MODULE	NA
GUI INTERFACE	Supported GUI 16 Bit True Color
PTZ PROTOCOL	PELCO-D, PELCO-P, etc.
BACKUP	
INTERNAL	NA
EXTERNAL	2*USB2.0 / Removable DVD-RW
NETWORK	YES
FILE FORMAT	.dat / AVI
GENERAL	
ALARM IN/OUT	8CH / 1CH
RS-485	1
UNIT DIMENSION(mm)	W220xD260xH47.5mm
OPERATION TEMPERATURE	10°～40°
WORKING HUMIDITY	10% ~ 90%
POWER CONSUMPTION	DC 12V,2A,10～15W (Exclude HDD)

eco
RoHS compliant

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SM-MAX804

8Ch. Standalone DVR with Full D1
Linux Operation System, H.264 Compression/AVI
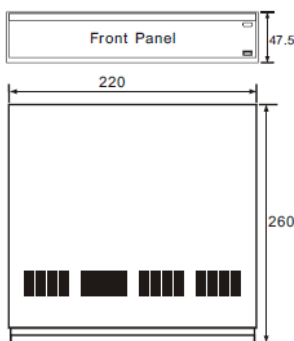
D1 Digital Video Recorder

Key Features ------------------------------------

- ✓ H.264 Main Profile Video Compression Technology Highly Improves Video Quality for Live, Recording and Network.
- ✓ Real Pentaplex Operation Allows Live Display, Record, Playback, Backup and Network Operation at the Same Time.
- ✓ Dual Encoding Streams Support, D1/CIF/QCIF Resolution Programmable.
- ✓ Support VGA and BNC Output at the Same Time.
- ✓ Support Audio IN/OUT.
- ✓ Build-in IE Auto Active, Certificated by Microsoft, More Safety for PC.
- ✓ Support 1*SATA 2TB HDD, Strong Storage Capacity for Long Time Recording.
- ✓ 1, 4 Channel Playback Simultaneously.
- ✓ Support DDNS for Remote View.
- ✓ Support Sensor Alarm.
- ✓ Support PTZ control.
- ✓ Support Multi-languages.
- ✓ Support Snapshot
- ✓ Support SOMAX Keyboard
- ✓ Remote Access by Internet Explorer, ISS and VMS Server.
- ✓ Audio Talk Back through Internet.
- ✓ Mobile Surveillance Supported, Including iPhone, iPad, Android.
- ✓ Long Time Pre-record, up to 30 Seconds.
- ✓ Support Live View and Playback Digital Zoom.
- ✓ Support Digital Waterproof Video Data Protection.

Dimensions ------------------------------------

Front Panel   47.5
220
260

Technical Specification

Model NO.	SM-MAX804
OPERATION SYSTEM	LINUX
VIDEO	
VIDEO SYSTEM	NTSC/PAL Switch Selectable
INPUT	BNC*8,1.0Vp-p,75ohm
VIDEO OUTPUT	1 CH BNC(1.0Vp-p,75Ω); HD VGA Output
SPOT	NA
LOOP OUT	NA
VGA OUTPUT	800 x 600, 1024 x 768, 1280 x 1024
AUDIO	
INPUT	4CH , RCA
OUTPUT	1CH,RCA
TALK BACK	YES
CONTROL	
MOUSE	2*USB2.0
IR CONTROLLER	YES
KEYBOARD	YES
STORAGE	
BUILD IN INTERFACE	SATA 2.6 *1 (1*HDD 2TB)
DISPLAY	
DIVISION	1, 4, 6, 8, 9
ZOOM	Preview and Playback Zoom Support
RECORDING	
COMPRESSION	H.264 Main Profile
RECORDING MODE	Manual/Schedule/Motion Detection/Sensor
RESOLUTION	NTSC:352*240 ; PAL:352*288
RECORD FRAME RATE	NTSC:240FPS@CIF ; PAL:200FPS@CIF (8CH CIF)
QUALITY	Worst, Worse, General, Good, Better, Best
MOTION DETECTION	Sensitivity: Multi Level,22*15Grid
WATER MARK	YES
PLAYBACK	
PLAYBACK FRAME RATE(PAL)	240(200)FPS@CIF 8CH CIF
MULTI CHANNEL PLAYBACK	1 ,4, 8
SPEED	Normal, FF(1X, 2X, 4X, 8X, 16X), Slow (1/2X, 1/4X), RW (8X, 16X, 32X)
SEARCH METHOD	Time, Event, Channels and Calendar
COMMUNICATION	
REMOTE SOFTWARE	IE Brower, Mobile, ISS
REMOTE OPERATION	Remote view, remote playback, remote setup
NETWORK SERVICE	TCP/IP,UDP,HTTP,DDNS,SMTP(SSL),LAN,DHCP,PPPOE, FTP, RTSP
MOBILE DEVICE	Iphone, Ipad, Android
3G EXTERNAL MODULE	NA
WAN RJ45	10/100Mbit/s
WIFI EXTERNAL MODULE	NA
GUI INTERFACE	Supported GUI 16 Bit True Color
PTZ PROTOCOL	PELCO-D, PELCO-P, etc.
BACKUP	
INTERNAL	NA
EXTERNAL	2*USB2.0 / Removable DVD-RW
NETWORK	YES
FILE FORMAT	.dat / AVI
GENERAL	
ALARM IN/OUT	8CH / 1CH
RS-485	1
UNIT DIMENSION(mm)	W220xD260xH47.5mm
OPERATION TEMPERATURE	10°～40°
WORKING HUMIDITY	10% ~ 90%
POWER CONSUMPTION	DC 12V,2A,10～15W (Exclude HDD)

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SM-MAX1601

16Ch. Standalone DVR with 3G & Wi-Fi Module
Linux Operation System, H.264 Compression

3G/Wi-Fi Digital Video Recorder
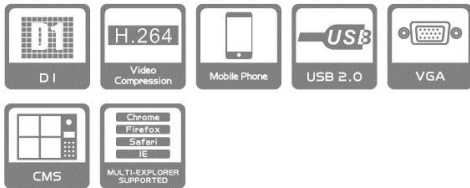
Key Features ------------------------------------

- ✓ 16 Channel Standalone DVR
- ✓ Linux Operation system, H 264 Compression/AVI
- ✓ Record Frame Rate Support CIF
- ✓ Remote Client, IE Brower, Mobile, CMS, Firefox, Google Chrome, Mac Safari
- ✓ Talk Back, RS485, VGA, SATA 2.6*2(2*HDD 2TB)
- ✓ 2*USB 2.0USB Disk up t0 32G, Removable DVD-RW
- ✓ Scalable 3G Module
- ✓ Scalable Wi-Fi Module
- ✓ High Speed 400MHz CPU
- ✓ 3Gb Memory Space
- ✓ 16Mb Flash Memory

Dimensions ------------------------------------

60.3   252.35   3395
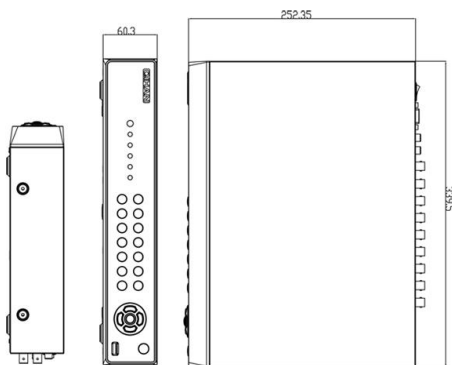
Technical Specification

Model NO.	SM- MAX1601
OPERATION SYSTEM	LINUX
VIDEO	
VIDEO SYSTEM	NTSC/PAL Switch Selectable
INPUT	BNC*16,1.0Vp-p,75ohm
VIDEO OUTPUT	1 CH BNC(1.0Vp-p,75Ω); HD VGA Output
CVBS	1CH, BNC
SPOT	NA
LOOP OUT	NA
VGA OUTPUT	STANDARD VGA*1: 1280 x 1024
AUDIO	
INPUT	1CH , RCA
OUTPUT	1CH,RCA
TALK BACK	YES
CONTROL	
MOUSE	2*USB2.0
IR CONTROLLER	YES
STORAGE	
BUILD IN INTERFACE	SATA 2.6 *2(2*HDD 2TB)
DISPLAY	
DIVISION	1, 4, 9, 16
ZOOM	Preview and Playback Zoom Support
RECORDING	
COMPRESSION	H.264 Main Profile
RECORDING MODE	Manual/Schedule/Motion Detection/Sensor
RESOLUTION	NTSC:352*240, PAL:352*288
RECORD FRAME RATE	NTSC:480FPS@CIF, PAL:400FPS@CIF
QUALITY	Worst, Worse, General, Good, Better, Best
MOTION DETECTION	Sensitivity: Multi Level,22*15Grid
WATER MARK	YES
PLAYBACK	
PLAYBACK FRAME RATE(PAL)	480(400)FPS@CIF
MULTI CHANNEL PLAYBACK	1, 4, 9, 16
SPEED	Normal, Slow & FF(1/4,1/3,1/2,1*,2*,3*,4*)
SEARCH METHOD	Time, Event, Channels and Calendar
COMMUNICATION	
REMOTE SOFTWARE	Remote Client, IE Brower, CMS, Firefox, Google Chrome, Mac Safari
REMOTE OPERATION	Remote view, remote playback, remote setup
NETWORK SERVICE	TCP/IP, UDP, HTTP, DDNS, SMTP(SSL), LAN, DHCP, PPPOE
MOBILE DEVICE	Win Mobile, Symbian S60 3rd/5th, IPhone, IPAD, Blackberry OS5.0, Android
3G EXTERNAL MODULE	YES, with USB 2.0 Port, WCDMA Signal
WAN RJ45	10/100/1000 Mbit/s
WIFI EXTERNAL MODULE	Yes, with USB 2.0 Port, 100Meters
GUI INTERFACE	Supported GUI 16 Bit True Color
PTZ PROTOCOL	1*RS485, Support 18 Kinds of Protocol
BACKUP	
INTERNAL	NA
EXTERNAL	2*USB2.0, Removable DVD-RW, USB Disk up to 32G
NETWORK	YES
FILE FORMAT	H.264 Compression / AVI
GENERAL	
ALARM IN/OUT	1CH / 1CH
RS-485	1
UNIT DIMENSION(mm)	W340xD268xH64mm
OPERATION TEMPERATURE	0°～55°
WORKING HUMIDITY	10% ~ 90%
POWER CONSUMPTION	DC 12V,4A,10～15W (Exclude HDD)

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SM-PRO DVR's Series
4/8/16Ch. Standalone DVR with 3G & Wi-Fi Module
Linux Operation System, H.264 Compression

3G/Wi-Fi/ HDMI/ Full Loop

D I | H.264 Video Compression | Mobile Phone | USB 2.0 | VGA

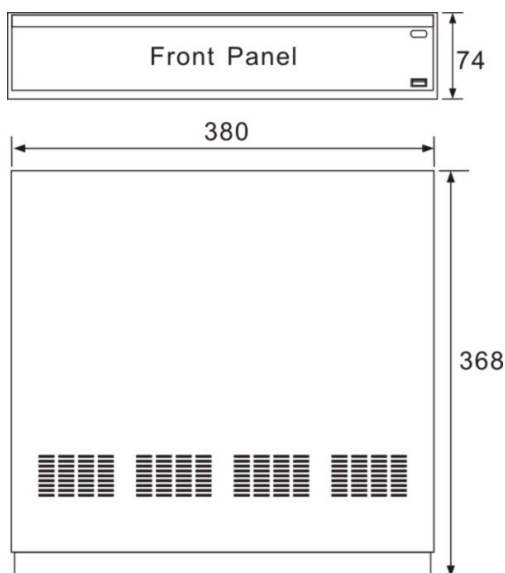CMS | MULTI-EXPLORER SUPPORTED | 3G | HDMI | Wi Fi
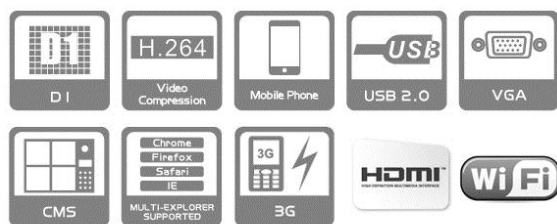
Mobile Phone Remote Monitoring
Note:
Android,IOS,RIM support download and install the vMeye software from the corresponding app store. Iphone support up to 4 channel viesing simultaneously.

Windows Mobile | Symbian | Iphone | Android | Blackberry

Dimensions --

Front Panel — 74

380

368

Key Features

✓ High Speed CPU 400/600MHz, Memory Space 2 GB, Flash 16MB with Excellent GUI Display.
✓ H.264 Main Profile Video Compression enhances 2.2 times of image quality and reduces 40% HDD occupation space.
✓ Dual Encoding Streams Support, D1 / 2CIF / CIF / QCIF Resolution Programmable.
✓ Linux Operation System with D1 High Resolution Programmable: QH-D2104A 4CH 25/30FPS @ D1; QH-D2108A 8CH 25/30FPS @ HD1; QH-D2116A 4CH 25/30FPS @ D1, 12CH 25/30FPS @ CIF.
✓ Support 1080P HDMI Output Optional, Genuine HD VGA Output and BNC Output at the same time, 4/8/16 CH Video Loop Out Optional.
✓ Cameras Power Supply by DVR.
✓ Support 2 X SATA2.6 2TB HDD, Strong Storage Capacity for 4 Months Recording.
✓ Digital Watermark for Video Data Protection.
✓ Friendly Design for New User, No More than 5 Seconds Express Setup.
✓ Support Audio Talk Back through Internet. More Convenience Communication with Surveillance Control Center.
✓ Support Motion Detection and Privacy Mask.
✓ Support Smart Phone Remotely View by Windows Mobile, Symbian S60 3rd/5th, IPhone, IPAD, Blackberry OS5.0, Android.
✓ REMOTE OPERATION: Remote View, Remote Playback, Remote Setup.
✓ 4/8/16 Channel Playback at the same time.
✓ Flexible Search Mode with Time, Even, Channels and calendar.
✓ Fast Backup with .avi and .264 Video Format Optional by USB Disk, Removable DVD-RW, SD Card.
✓ Multi-DVR Powerful CMS Control / IE Explorer / Firefox Explorer / Google Chrome Explorer / MAC Safari Explorer.
✓ Build-in IE Auto Active, Certificated by Microsoft, More Safety for PC.
✓ Powerful Network Software: Built-in Web Server, Multi-DVR Client Software, Networking Access for Equipment Search Remote Live Viewing, Recording, Playback, Setting, System Statue, Event Log, Email & FTP Function.
✓ Support LAN, WAN, Support 3G Dial Up / WIFI Module by USB 2.0 Port Optional.
✓ Support DHCP / PPPOE / FTP / DNS / DDNS / NTP / Email alarm / IP right management / IP search / network alarm center functions, support WEB client, standalone client and SDK.
✓ Multiple control methods: Front Panel, IR Remote Controller, USB Mouse, RS 485 Keyboard.
✓ Alarm triggering screen tips, buzzer, PTZ Preset, Email, Snapshot & FTP Upload.
✓ Smart HDDs Management: non-working HDD hibernating, HDD faulty alarm, Raid function.
✓ Build-in Digital Operation Guidance.
✓ Smart Equipment Shut Down by Software, Front Panel. Good protection for Equipment.
✓ Recording Parameter Programmable by Clients.
✓ Support 26 Kinds of Language: English, Farsi, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Poland, Portugal, Russian, Spanish, Thai, Turkey, Vietnamese, Romanian, Brazilian, Korean, Indonesian, Swedish, Arabic, Bulgarian, and Czech.
✓ Free customization according to your needs.
✓ Support any view mode digital zoom.
✓ Long time pre-record, up to 30 seconds.
✓ Supports playback the defined timing by dragging the mouse on the time bar.
✓ Supports play the record file on the backup device directly.
✓ Support large batch file backup simultaneously.
✓ Support the RAID1 function and redundancy record.
✓ Support record and backup with SD card (D22). Optional

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SM-PRO DVR's Series

3G/Wi-Fi/ HDMI / Full Loop

Technical Specification

Model NO	SM-PRO404HDL	SM-PRO808HDL	SM-PRO1616HDL
OPERATION SYSTEM	LINUX	LINUX	LINUX
VIDEO			
VIDEO SYSTEM	NTSC/PAL Switch Selectable	NTSC/PAL Switch Selectable	NTSC/PAL Switch Selectable
INPUT	BNC*4,1.0Vp-p,75ohm	BNC*8,1.0Vp-p,75ohm	BNC*16,1.0Vp-p,75ohm
VIDEO OUTPUT	2 CH BNC(1.0Vp-p,75Ω); HD VGA Output; HDMI 1080P Output	2 CH BNC(1.0Vp-p,75Ω); HD VGA Output; HDMI 1080P Output	2 CH BNC(1.0Vp-p,75Ω); HD VGA Output; HDMI 1080P Output
SPOT	NA	NA	NA
LOOP OUT	4CH	8CH	16CH
VGA OUTPUT	800 x 600, 1024 x 768, 1280 x 1024, 1440 x 900	800 x 600, 1024 x 768, 1280 x 1024, 1440 x 900	800 x 600, 1024 x 768, 1280x 1024
AUDIO			
INPUT	4CH , RCA	8CH , RCA	8CH , RCA
OUTPUT	1CH,RCA	1CH,RCA	1CH,RCA
TALK BACK	YES	YES	YES
CONTROL			
MOUSE	2*USB2.0	2*USB2.0	2*USB2.0
IR CONTROLLER	YES	YES	YES
STORAGE			
BUILD IN INTERFACE	SATA 2.6 *2(2*HDD 2TB)	SATA 2.6 *2(2*HDD 2TB)	SATA 2.6 *2(2*HDD 2TB)
DISPLAY			
DIVISION	1, 4	1, 4, 8	1, 4, 8, 9, 16
ZOOM	Preview and Playback Zoom Support	Preview and Playback Zoom Support	Preview and Playback Zoom Support
RECORDING			
COMPRESSION	H.264 Main Profile	H.264 Main Profile	H.264 Main Profile
RECORDING MODE	Manual/Schedule/Motion Detection/Sensor	Manual/Schedule/Motion Detection/Sensor	Manual/Schedule/Motion Detection/Sensor
RESOLUTION	NTSC:704*480,704*240,352*240 PAL:704*576,704*288,352*288	NTSC:704*480,704*240,352*240 PAL:704*576,704*288,352*288	NTSC:704*480,704*240,352*240 PAL:704*576,704*288,352*288
RECORD FRAME RATE	PAL:100FPS@D1,100FPS@HD1,100FPS@CIF (4CH D1)	PAL:100FPS@D1,200FPS@HD1,200FPS@CIF (8CH HD1)	PAL:175FPS@D1,350FPS@HD1,400FPS@CIF (4CH D1 + 12CH CIF)
QUALITY	Worst, Worse, General, Good, Better, Best	Worst, Worse, General, Good, Better, Best	Worst, Worse, General, Good, Better, Best
MOTION DETECTION	Sensitivity: Multi Level,8*8Grid	Sensitivity: Multi Level,8*8Grid	Sensitivity: Multi Level,8*8Grid
PLAYBACK			
PLAYBACK FRAME RATE(PAL)	120(100)FPS@D1; 4CH D1	240(200)FPS@HD1; 8CH HD1	480(400)FPS@CIF; 16CH CIF
MULTI CHANNEL PLAYBACK	1, 4	1, 4, 8	1, 4, 8, 9, 16
SPEED	Normal, Slow & FF(1/4,1/3,1/2,1*,2*,3*,4*)	Normal, Slow & FF(1/4,1/3,1/2,1*,2*,3*,4*)	Normal, Slow & FF(1/4,1/3,1/2,1*,2*,3*,4*)
SEARCH METHOD	Time, Event, Channels and Calendar	Time, Event, Channels and Calendar	Time, Event, Channels and Calendar
COMMUNICATION			
REMOTE SOFTWARE	Remote Client, IE Brower, Mobile, CMS, Firefox, Google Chrome, Safari	Remote Client, IE Brower, Mobile, CMS, Firefox, Google Chrome, Safari	Remote Client, IE Brower, Mobile, CMS, Firefox, Google Chrome, Safari
REMOTE OPERATION	Remote view, remote playback, remote setup	Remote view, remote playback, remote setup	Remote view, remote playback, remote setup
NETWORK SERVICE	TCP/IP,UDP,HTTP,DDNS,SMTP(SSL), LAN,DHCP,PPPOE	TCP/IP,UDP,HTTP,DDNS,SMTP(SSL), LAN,DHCP,PPPOE	TCP/IP,UDP,HTTP,DDNS,SMTP(SSL), LAN,DHCP,PPPOE
MOBILE DEVICE	Win Mobile, Symbian S60 3rd/5th, IPhone, Blackberry OS5.0, Android	Win Mobile, Symbian S60 3rd/5th, IPhone, Blackberry OS5.0, Android	Win Mobile, Symbian S60 3rd/5th, IPhone, Blackberry OS5.0, Android
3G EXTERNAL MODULE	YES, with USB 2.0 Port, WCDMA Signal	YES, with USB 2.0 Port, WCDMA Signal	YES, with USB 2.0 Port, WCDMA Signal
WAN RJ45	10/100/1000 Mbit/s	10/100/1000 Mbit/s	10/100/1000 Mbit/s
WIFI EXTERNAL MODULE	Yes, with USB 2.0 Port, 100Meters	Yes, with USB 2.0 Port, 100Meters	Yes, with USB 2.0 Port, 100Meters
GUI INTERFACE	Supported GUI 16 Bit True Color	Supported GUI 16 Bit True Color	Supported GUI 16 Bit True Color
PTZ PROTOCOL	1*RS485, Support 18 Kinds of Protocol	1*RS485, Support 18 Kinds of Protocol	1*RS485, Support 18 Kinds of Protocol
BACKUP			
INTERNAL	Built-in DVD-RW (optional)	Built-in DVD-RW (optional)	Built-in DVD-RW (optional)
EXTERNAL	2*USB2.0; Removable DVD-RW	2*USB2.0; Removable DVD-RW	2*USB2.0; Removable DVD-RW
NETWORK	YES	YES	YES
FILE FORMAT	H.264 Compression / AVI	H.264 Compression / AVI	H.264 Compression / AVI
GENERAL			
ALARM IN/OUT	4CH / 1CH	8CH / 1CH	8CH / 1CH
RS-485	1	1	1
RS-232	1	1	1
UNIT DIMENSION(mm)	W380xD368xH74mm	W380xD368xH74mm	W380xD368xH74mm
OPERATION TEMPERATURE	0°～55°	0°～55°	0°～55°
WORKING HUMIDITY	10% ~ 90%	10% ~ 90%	10% ~ 90%
POWER CONSUMPTION	DC 12V,4A,10～15W (Exclude HDD)	DC 12V,4A,10～15W (Exclude HDD)	DC 12V,4A,10～15W (Exclude HDD)

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SM-BUS04M

4Ch. Car Black Box with Anti-vibration design
Anti-shake connectors (Optional 3G)

4-CH SD Card Bus DVR

Key Features ------------------------------------

- ✓ High video quality based on H.264 profile compression.
- ✓ High resolution recording, up to mega-pixel for 4 channel (1280 x 1024) and D1 resolution for 1 channel (PAL: 704 x 576/NTSC: 720 x 480).
- ✓ USB port connects thumb drive/external HDD storage.
- ✓ Compact size & light weight, much easier for installation.
- ✓ Support from 8VDC to 32VDC, applicable for 12VDC and 24VDC vehicles.
- ✓ The recorder provides each camera with stable +12VDC power; DVR can detect the short cut on power circuit.
- ✓ Can use ignition to control the power. Configurable power timer after ignition is off.
- ✓ Automatic, event trigger, schedule or motion recording options.
- ✓ Can record speed with audio and video.
- ✓ Support over speed alarm.
- ✓ Support 3 sensors, can record brake, return, right turn, left turn light status into the record file.
- ✓ External GPS allows for vehicle tracking and location with video and audio.
- ✓ Use AVI format for record file. Compatible with different player software.
- ✓ Support FAT32 file system, record file can be read directly on Windows, Linux.
- ✓ Motion detection and the sensitivity can be adjusted.
- ✓ Date and time stamp records onto footage.

Technical Specification

Model NO.	SM- BUS04M
System	
Language	English/Japanese/French/Russian
Interface	Graphical User Interface
Security	Administrator and user password protected
Video Input	1/2/4 channel video input, 1.0V，p-p，75Ω，BNC
Video Output	1 channel video output, 1.0V，p-p，75Ω，BNC
Display	1/2/4 channel display
Video Standard	PAL (25fps) NTSC (30fps)
Audio Input	1/2/4 channel audio input, 20KΩ，RCA
Audio Output	1 channel audio output, 500Ω，RCA
Output level	1V ~2V, p-p
Recording mode	Audio and video simultaneously recording
Audio Compression	G711
Video Compression	H.264 High Profile
Resolution	D1 at 100fps
Storage Video bitrate	D1: 200Kbps ~ 2Mbps,4 selectable quality
Storage Audio bitrate	8KB/s(Compressed)
Storage	Hard drive, SD card, External USB device (memory stick or hard drive)
Format	AVI (audio and video output directly synchronization)
Sensors	1 speed sensor, 1 ignition sensor, 3 common use sensors
Communication	Two RS232 connector and one RS485 connector
Network	RJ45，10M/100M LAN port
GPS	Support external GPS module, geographic coordinates, speed can be written in code stream
3rdparty player	VLC media player, Storm player, WINAMP
Firmware update	Via SD card or USB disk
Power input	DC：+8V ~ +32V
Power output	+12V@1.5A；+5V@1A
Power consumption	Less than 5W；less than 0.1W in standby mode
Working temperature	-10° ~ +60°
Size	180mm（Length）×180mm（width）×42mm（Height）

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SM-Ultimate416H/816H

16Ch. Standalone DVR with Full D1 High Storage
Linux Operation System, H.264 Compression/AVI

D1/3G/Wi-Fi/ HDMI / Full Loop

Technical Specification

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Model NO.	SM-Ultimate416H/816H
OPERATION SYSTEM	LINUX
VIDEO	
VIDEO SYSTEM	NTSC/PAL Switch Selectable
INPUT	BNC*16,1.0Vp-p,75ohm
VIDEO OUTPUT	1 CH BNC(1.0Vp-p,75Ω); VGA Output 1 CH BNC SPOT(1.0Vp-p,75Ω); VGA Output; HDMI 1080P Output
SPOT	1 CH BNC SPOT(1.0Vp-p,75Ω);
LOOP OUT	16CH Optional
VGA OUTPUT	1024*768, 1280*720, 1280*1024, 1400*900, 1920*1080
AUDIO	
INPUT	16CH , RCA
OUTPUT	1CH,RCA
TALK BACK	YES
CONTROL	
MOUSE	2*USB2.0
IR CONTROLLER	YES
KEYBOARD	YES
STORAGE	
BUILD IN INTERFACE	SM-Ultimate416H : SATA 2.6 *4(4*HDD 2TB) SM-Ultimate816H :SATA 2.6 *8(8*HDD 2TB)
DISPLAY	
DIVISION	1, 4, 8, 9, 16
ZOOM	Preview and Playback Zoom Support
RECORDING	
COMPRESSION	H.264 Main Profile
RECORDING MODE	Manual/Schedule/Motion Detection/Sensor
RESOLUTION	NTSC:704*480,352*240 PAL :704*576,352*288
RECORD FRAME RATE	NTSC:480FPS@D1,400FPS@CIF PAL:400FPS@D1,400FPS@CIF (16CH D1)
QUALITY	Worst, Worse, General, Good, Better, Best
MOTION DETECTION	Sensitivity: Multi Level,16*12Grid
PLAYBACK	
PLAYBACK FRAME RATE(PAL)	480(400)FPS@D1 16CH D1
MULTI CHANNEL PLAYBACK	1 to 16 (Max 16)
SPEED	Normal, FF(1X, 2X, 4X), Slow (1X, 1/2X, 1/3X, 1/4X), RW (1X, 2X, 3X, 4X)
SEARCH METHOD	Time, Event, Channels and Calendar
COMMUNICATION	
REMOTE SOFTWARE	IE, Google Chrome, Firefox Moziila, Mac Safari, Mobile, CMS
REMOTE OPERATION	Remote view, remote playback, remote setup
NETWORK SERVICE	TCP/IP,UDP,HTTP,DDNS,SMTP(SSL),LAN,DHCP,PPPOE, FTP, RTSP
MOBILE DEVICE	Iphone , Ipad, Android, Blackberry, Windows Mobile, Symbian
3G EXTERNAL MODULE	YES, with USB 2.0 Port, WCDMA Signal
WAN RJ45	10/100Mbit/s
WIFI EXTERNAL MODULE	Yes, with USB 2.0 Port, 100Meter
GUI INTERFACE	Supported GUI 16 Bit True Color
PTZ PROTOCOL	PELCO-D, PELCO-P, etc.
BACKUP	
INTERNAL	DVR-RW (Not included)
EXTERNAL	2*USB2.0 / Removable DVD-RW
NETWORK	YES
FILE FORMAT	.dat / AVI
GENERAL	
ALARM IN/OUT	16CH / 4CH
RS-485 / RS-232	1
UNIT DIMENSION(mm)	W478xD440xH100mm
OPERATION TEMPERATURE	0°～+55°
WORKING HUMIDITY	10% ~ 90%
POWER CONSUMPTION	DC 12V,6A, <30W (Exclude HDD)

Key Features

✓ H.264 High Profile Video Compression Technology Highly Improves Video Quality for Live, Recording and Network.
✓ 16 Channel D1 Real Time Record and Playback at a Time.
✓ Support SPOT Output.
✓ Support SATA HDD, Strong Storage Capacity for Long Time Recording.
✓ Fast Backup by USB Disk, Removable HDD, Removable DVD-RW and Network.
✓ Support Sensor Alarm.
✓ Remote Access by Internet Explorer, Google Chrome, Mozilla Firefox, Mac Safari and CMS.
✓ Audio Talk Back through Internet.
✓ Mobile Surveillance Supported, Including iPhone, iPad, Android, Blackberry, Symbian and Windows Mobile.
✓ Long Time Pre-record, up to 30 Seconds.
✓ Support HDD RAID1 Function.
✓ Support Live View and Playback Digital Zoom.

Dimensions

Front Panel   100

478

440
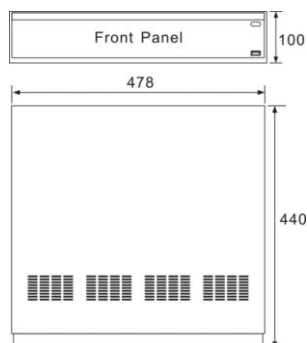
- SM-Ultimate416H: Support SATA*4 (4*HDD/2TB or 3*HDD + 1*DVD-RW), Max 2TB per HDD.

- SM-Ultimate816H: Support SATA*8 (8*HDD/2TB or 5*HDD + 1*DVD-RW), Max 2TB per HDD.

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RoHS compliant

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SM-Matrix6416HL
Rack-able 64-16 video matrix

64-16 video matrix

Key Features ------------------------------------

- Every road, video graphics, English, text graphics mixed with title overlay function.
- Using 4 u, plug-in module combination structure with high density, convenient combination.
- Can be set up to monitor, keyboard, camera permission; System can partition Settings.
- A hot backup host matching design, make the host stability more secure
- Audio/video input and output ports, and communication interface with surge protection and lightning interference design
- System, a multi-stage matrix can be through the RS485 network
- Support external 32 points, control the keyboard and can support various networking function level 3 above
- Take full English menu, can be preset functions of matrix
- After, alarm linkage, automatic open the camera and lighting, automatic switching preset point image and start the video
- Alert any protection zones can be preset mode: timing, manual, cloth/removal and query alarm record
- Video output, output can be expanded to 16 road, road input can be expanded to 64 video input, input ring design
- Equipped with built-in IP control module and video server design, can through the IP network to operation and switching matrix host viewing video images, remote access to camera and system control

Key Features

- Single box, 64 video input 16 road video output
- Screen: the date/time, camera title, alarm information and so on, support unit key intelligence software to modify the camera header information, etc...
- Video input signal: 1 Vp - p Ω (75)
- Video output signal: 1 Vp - p Ω (75)
- Sound frequently input signals: 0.5 the Vp - p ~ 5 Vp - p Ω (600)
- Sound output signal frequently: input to follow, a video signal to noise ratio: > 70.5 dB
- Audio signal to noise ratio: 58 db >
- Video input isolation: > 55 db
- Video output isolation between: > 50 db
- Audio input isolation: 58 db >
- Video output isolation between: > 55 db
- Audio channel bandwidth: 50 hz ~ 30 KHZ
- Audio channel bandwidth: 12 MHZ
- Switching properties: manual/automatic programming all cross non-blocking switch, with a single sequence and groups switch function
- Visual/audio switch: synchronous switch
- Synchronous, switch mode: the power supply switch
- Switching speed: PAL: 20 ms or less NTSC: 16.7 ms or less
- Data: 10 years or more
- Data communication: more than RS485
- Graphic overlay characteristics: highlight, stable, clear, no beat phenomenon
- Input image input methods: computer programming
- With optional IP mode: Ethernet control module or one way video server module
- Environmental conditions: temperature: - 10 degrees Celsius ~ 50 degrees Celsius, the temperature: 90% or less (no condensation)
- Size: 480 mm (W) x 178 mm x 310 mm
- Weight: 331 bs (23 kg)
- Installation: rack installation, desktop installation
- Power supply: AC220V, 50 ~ 60 hz, 50 w
- Potter rate: 1200240 0480 09600 (optional)

SM-KB158
RS485 Surveillance Keyboard, Support PELCO matrix, Built-in multi-protocol

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