

# DATASHEET



## HIGH DEFINITION RECORDING AND PLAYBACK

The DV-IP HD is the first in a series of DM products offering High Definition recording and playback. The DV-IP HD is a full desk top High Definition CCTV system in a box, with all the benefits of a NetVu Connected Server and is the ideal companion product to the CamVu2000, or other High Definition or Megapixel Cameras, allowing multiple megapixel video streams to be viewed and recorded simultaneously in high definition.

Using embedded control technology and an attached keyboard or mouse, the DV-IP HD is able to offer local control of the system and

viewing of the images (both live and playback) through the attached monitor via an HDMI connector, allowing the user to view and control high definition images locally without having to transfer data across the company network.

In addition, by utilising the company's unique **TransCoding** technology, users are able to view and capture high definition images locally whilst simultaneously streaming bandwidth optimised images to remote users without impacting the network.

## FEATURES

- 8 Channel Network DVR with High Definition (HD) monitor output
- Local playback and recording in high definition quality
- Mix analogue and IP (megapixel) camera sources
- Ideal companion to Dedicated Micros CamVu2000 megapixel camera
- Up to 4CIF recording of analogue cameras
- Part of the growing range of **AnalytcsCapable** DVRs
- Simultaneous MPEG-4 & JPEG transmission and recording
- HDMI main monitor output - view HD images locally without the need to transfer data over the corporate network
- Local control via attached keyboard, mouse or IR remote
- Built-in internal DVD-R (DVD Writer) and USB ports
- **MultiMode** Recording - Dynamically-switchable resolution, record-rate & compression (MPEG4/ JPEG) per camera
- Simultaneous record, playback, live viewing, archiving and multiple user network viewing with no loss of recording performance
- Remote Alarm Reporting - can be used for central monitoring applications (BS8418 Compliant)
- False alarm suppression and alternative signalling path
- Video motion search allows search back through recordings for movement in a specific area of the image
- **TransCoding** allows bandwidth optimised images to be streamed to remote operators without impacting the network
- Access up to 1980 cameras from the local control of the Video Server using Embedded Console



## CAMERAS

- 8 camera inputs (analogue, IP, megapixel)
- 1V Pk-Pk Video Input (looping)
- PAL, NTSC
- Colour, Mono mix
- 75Ω Camera Termination provided in software
- Compatible with Dedicated Micros CamVu2000 megapixel camera

## RECORDING

Playback and record to hard disk simultaneously.

Alarmed or manually selected images can be protected from being overwritten.

## NETWORK CONTROL

Control of DV-IP HD is achieved from local keyboard or IR control over Ethernet either by NetVu ObserVer or via a standard web browser. Pre-loaded web pages allow for setup, configuration, image archiving, live viewing, telemetry and playback.

DV-IP HD is compatible with DHCP for automatic IP address assignment, the unit also supports manual IP settings. Video Bandwidth Restriction ensures image transmission only uses allocated bandwidth.

## MONITOR VIEWING

The DV-IP HD provides two HDMI monitor outputs that can be configured as both Main monitors or a Main and Spot monitor combination. Optional composite monitor output provided.

## CAMVU2000

The DV-IP HD is the ideal companion for Dedicated Micros CamVu2000 megapixel camera. Offering high definition image capture at 6 times the resolution of analogue cameras, CamVu2000 is ideal for situations where high resolution, high quality images are required. Up to 8 CamVu's can be connected to DV-IP HD, and combined with the DVR's high definition record and display capability, HD CCTV is now a practical reality for CCTV users.

## MULTIMODE RECORDING

MultiMode recording gives you the ability to set different record rates, resolutions and compression algorithms across scheduled, normal and alarm modes. This gives the flexibility to adjust resolution, record rates and compression settings (MPEG-4/JPEG) dynamically on individual cameras and across the whole unit.

## TEXT SUPPORT

Through the inclusion of Text Support, the DV-IP HD can search captured transaction data for specific goods purchased, transaction numbers, credit card references, keywords etc. and jump straight to the associated video sequence.

## RECORDING

Playback and record to hard disk simultaneously.

Alarmed or manually selected images can be protected from being overwritten.

## NETVU CONNECTED

The DV-IP HD has NetVu Connected technology built-in to ensure maximum compatibility with future developments in networked security. NetVu Connected technology enables the DV-IP HD to fully interoperate with other NetVu Connected compatible products from DM including the DV-IP Decoder, NetVu ObserVer and PDA Viewers.

## RECORD RATE

The DV-IP HD can record at 25/30pps (PAL/NTSC) per camera on up to 8 cameras at 4CIF resolution.

## ACTIVITY DETECTION

Each activity detection will switch the selected camera from normal record profile to alarm record profile. This feature can also; log the event, activate a relay, switch camera, email on activity and remote alarm reporting.

## SCHEDULING

Choice of day, night or weekend scheduling offers the ability to automatically alter the record rate for background alarm and activity recording. Activation is via a timer or keyswitch alarm input.

## IP STREAMING & RECORDING

The DVR is capable of seamless recording & display of IP video streams from IP Cameras, IP domes, encoders and other NetVu Connected DVR's. Telemetry is also supported. Offering the ability to view and record IP Sources, irrespective of the devices' location, IP Streaming and Recording provides viewing and control across all connected analogue and IP Cameras, seamlessly displaying all through a connected monitor.

## 3RD PARTY IP CAMERA SUPPORT

- IQ Invision
- Sony
- JVC
- Axis

Others will become available as and when tested

## TIMED EXPIRY

Timed expiry option allows images to be held for a selected number of days. Images on the disk which are older than the number of days selected are not accessible.

## AUXILLARY AUDIO (MONO)

- 2 x Audio channels
- Full audio with recording on each input software selectable
- 47KΩ input / output impedance

## PRE-ALARM

Each camera input can continuously capture a configurable number of images at a user defined pre-alarm capture rate. When an event occurs, the images captured before the alarm event are recorded to disk, allowing the viewer to see enhanced evidence leading up to the event.

## FALSE ALARM SUPPRESSION

Advanced alarm zones added to DV-IP HD allow you to combine multiple detection sources to minimise false triggers. E.g. you can set an alarm to be triggered by a combination of a PIR and Camera VMD to remove miss-triggers from either source. Added to this, each alarm input can be temporarily disabled by a remote administrator to ensure that faulty detectors do not mask real alarm incidents.

## ALARMS AND RELAYS

20 Normally open/closed tamper proof alarm inputs via back panel. One global keyswitch can be assigned to operate from any of these inputs and is configurable with entry/exit route timers. There are 4 relay outputs configurable to trigger in response to events.

## ALARM SUPPORT

- Tamper (Resistance)
  - 0 - 900Ω - Tamper (Short circuit)
  - 900 - 1.2kΩ - Normal (Closed)
  - 1.2 - 12kΩ - Alarm (Open)
  - 12kΩ - Infinity Tamper (Open circuit)
- Voltage Free
- Closed contact operation
- VMD Trigger
- Camera Fail Trigger

## ADVANCED ALARM SUPPORT

- Tamper proof alarm inputs
- Nuisance detector management
- Application watch dog
- Comprehensive system logs
- Secondary signalling support via relay contact
- Relay system set/unset notification
- Entry/Exit routes for alarm inputs

## COMPRESSION

JPEG & MPEG-4 format files.

## GIGABIT ETHERNET

The DV-IP HD includes both Gigabit and 10/100 Ethernet connections. By utilising the Gigabit connection to connect cameras and devices, including megapixel cameras, to the DV-IP HD the user is able view, record and control images without having to transfer data across the company network. The 10/100 Ethernet connection can then be used to access the DVR from a remote viewing client such as NetVu ObserVer, NetVu Console or Pick-a-Point or to access configuration files. For low bandwidth remote network links, viewing applications can utilise Dedicated Micros unique **TransCoding** technology to request that recorded video, irrespective of format, is streamed in MPEG-4 format.

## NETWORK CAPABILITIES

The true display and streaming performance of the DV-IP HD can be fully realised when connected to Dedicated Micros embedded Decoder and Client solutions, such as the DV-IP Decoder (please see 'Remote Viewing & Control' section for further details). The DV-IP HD is capable of streaming out 8 cameras at 25pps, 4CIF or 6pps when used with 2Megapixel Cameras (both at Mpeg4).

## REMOTE VIEWING & CONTROL

### Pick-A-Point

The Pick-a-Point system brings together the CCTV system components into the control room environment, providing you with a dedicated multiple site video management solution for medium and large scale CCTV deployments.

Pick-a-Point is able to replicate the simplicity of operation associated with a traditional analogue matrix by allowing control of multiple video servers without the need for thousands of metres of cabling. It also offers the potential to build scalable video walls - including HD displays - that allow cameras from any number of monitored sites to be viewed simultaneously.

### Standard Browser

Integrated into the configuration web pages is a remote viewing client that duplicates identically the local on-screen user interface of the video server.

Removing the need to install any separate software this remote viewer can be used on any compatible browser and through mobile devices such as PDA's and smartphones

### NetVu ObserVer

- Live full, quad, 6, 9, 16 and 32 way screens
- VCR style fast forward and rewind, playback and frame advance/rew
- GOTO time and date
- File export of digitally signed images over the network to the user's PC
- Viewing of archived images
- Telemetry control, including PTZ and telemetry presets
- Multiple user access
- Site map
- Network viewing is also available for Mac OSX and Linux

See the latest NetVu ObserVer datasheet for more information.

## DATA PORTS

Serial Ports: 2x RS485, 2x RS232

Ethernet: 2x Ethernet RJ-45 1 x 10/100 Base T, 1 x 10/100/1000 Base T Ethernet Connections.

USB: 3 x USB 2.0 Connector (1 positioned at front of unit)

SATA: 2 ports

Keyboard: 1 x RJ12

## MANAGED STORAGE FOR CCTV

- Support of two DM Managed Storage expansion units connected via external SATA connection
- Managed Storage Units provide a high-capacity, environmentally managed storage in a single box
- Disk temperature is maintained at a constant level, extending drive life
- Management of disks running - only spinning those in use can extend drive life
- Due to changing drive sizes contact DM's Customer services department for the latest details on DM Managed Storage Units models

## COMMON CONFIGURATION INTERFACE

A Common Configuration interface is displayed when the units' configuration screens are accessed locally at the unit or remotely via a web browser. This unified system ensures that the installer is familiar with the configuration screens irrespective of their location to the unit, minimising training and familiarisation time and increasing the speed of installation and alteration to features.



## COLOUR CODED SOFT KEY OPERATION

The DV-IP HD is operated using our unique and intuitive colour coded soft key menus. This means that the user is logically guided through each function or operation simply, step by step. The five colour coded keys on the keyboard and remote control correspond with the five colour soft keys that appear on screen. So, whichever control device is preferred, operation of the product is consistent, reducing operator training and support.

## EMBEDDED NETVU CONSOLE

New Embedded NetVu Console control means that you can connect, view and control upto 20 sites, comprising of upto 8 NetVu Connected DVRs or Servers and 99 cameras per site. Camera selection can be simplified by using bespoke camera selection maps.

## **Analyt**icsCapable

**Analyt**icsCapable products can be upgraded to run a range of Dedicated Micros analytics solutions including; ANPR, Object Left, Object Counting, Object Removed and Intrusion Detection / Perimeter Protection.

Already enabled within the hardware of the DVR, only a software licence upgrade on **Analyt**icsCapable Digital Video Recorders is required. Please contact our Customer Services team for more information.



## VIDEO TIMELINE

The Timeline feature is a new intuitive interface for the control and navigation of playback video. With control via IR Remote or connected keyboard, the colour-coded on-screen display matches the keys on the remote or keyboard allowing the user to control the video forward or backwards in incremental steps of seconds, minutes, hours, days and weeks. Ideal for the rapid search of captured video.

# SPECIFICATION

## ABSOLUTE POSITIONING

Use the Absolute Positioning capability of an Oracle Dome and the on-screen Camera Selection Maps to select and move cameras to any area of the site in one mouse click. ^

## MAPS

Users can now navigate around their CCTV installation using graphical maps presented on the local monitors screen. Selecting the relevant camera from the map will instantly connect the user to that camera's image stream. With the ability to load bespoke map images and floor plans on the DVR to reflect their installations, the Maps feature is ideal for quickly identifying camera locations around a site or CCTV network.



## point&go

Point&Go provides the user with easy to use, fast, accurate telemetry control via an attached monitor. With no need for a telemetry keyboard, users are able to use Pan & Tilt control of a DM Oracle Dome simply by clicking an area of the monitor – the camera will instantly respond, positioning the selected area in the middle of the screen, ideal for tracking movement through a scene. ^

## ELECTRONIC PTZ (EPTZ)

Offering a capability over and above traditional 'digital zoom' techniques, Dedicated Micros ePTZ uses an advanced 'interpolation' algorithm that reveals detailed information that simple pixel-stretching digital zoom commands cannot.

With a simple key-press, users can operate ePTZ as they would Analogue Zoom – moving around the scene and zooming in / out using the associated keyboard joystick or remote control – even on static analogue cameras.

## TELEMETRY

Built-in RS485/Twisted pair and coax protocols provide direct control of the numerous domes including but not limited to the following:

- Dedicated Micros 2040, 2060 to Oracle
- Honeywell / VCL Orbiter & Jupiter Microspheres™
- GE CyberDome™
- BBV RS485 StarCard
- Bosch/Philips G3
- Pelco P, Pelco D, Pelco C
- American Dynamics
- Panasonic

## COLOUR RESOLUTION

Sampling rate: 13.5 MHz to CCIR 601  
Number of pixels: PAL 720h x 512v  
NTSC 720h x 448v  
16.8 million colours 256 levels of grey, 8-bit luma.

## RESOLUTION

QCIF, CIF, 2CIF and 4CIF resolution  
PAL: Max 704h x 576v, NTSC: Max 704h x 480v

## LANGUAGES

English, French, German, Spanish, Italian, Russian, Czech, Dutch, Hungarian, Swedish, Portuguese, Croatian, Danish, Finnish, Norwegian.

## TEMPERATURE RANGE

Operating temperature 5 – 40°C (41 – 104°F).

## RELATIVE HUMIDITY

10% - 85% Non-condensing.

## DIMENSIONS

- 89mm (H) x 440mm (W) x 420mm (D)

## WEIGHT

DV-IP HD: 11.4 kg (25.1 lbs) with built-in PSU.

## POWER SUPPLY

- DV-IP HD: 500W Internal Power Supply
- Input Voltage: 100-240 V AC 50/60Hz.

## WARRANTY

3 years warranty including HDDs.

^ Absolute Positioning and Point&Go require an Oracle Dome connected via RS485 to a Next Generation DV-IP product such as the DV-IP HD

Model Code	Description
DM/DVPH/8H30	8 channel (IP & analogue). High definition recording, TransCoding, 2 x HDMI output, ITB, embedded console, video timeline
DM/DVPH/8H60	8 channel (IP & analogue). High definition recording, TransCoding, 2 x HDMI output, 2TB, embedded console, video timeline

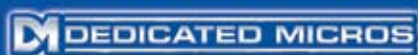
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