

# 4000 Series

## 4210 Digital Video Recorder

The March Networks™ 4210 DVR is an IP-networked digital video recorder for customers who want the latest in digital video management and storage capabilities, in a system that provides a total of 60 fp (NTSC), 50 fps (PAL) across 16 cameras.



### Key Features

The 4210 DVR provides:

- Concurrent recording speeds of 4 fps (NTSC), 3 fps (PAL) on each of 16 cameras, with scalable allocation of capture rate up to 15 fps (NTSC), 12.5 fps (PAL) on four cameras
- Up to 16 alarm inputs, as well as up to 12 two-way audio ports, for complete audio/video security coverage
- Programmable increase of recording rate on alarms for high quality event archives
- High-capacity internal and external video storage, with disk mirroring capability for added reliability
- Internal back-up battery for power brown-out protection
- Industry-first docking station architecture for cost-effective and reliable installation and maintenance
- Full configuration, management and video retrieval, remotely via an IP network or dial-up line
- Flexible bandwidth control to align with network capabilities
- Local and remote video export to removable media (USB-connected CD or memory stick), including auto-run Video Player

### High-value performance, for a range of applications

The March Networks 4210 DVR provides impressive video capture, transmission and storage capabilities. Customers who demand cost effective, reliable performance, such as bank branches, small to medium sized retail chains and a range of commercial and government facilities, will find this unit ideally suited to their needs.

Modular design allows the 4210 DVR to be installed easily, on a desktop, on an equipment-closet wall, or in a 19" rack. Proven software tools allow the unit to be accessed and managed, remotely and securely, from any authorized client on the network. Larger, multi-site customers can take advantage of the control and efficiency provided by our powerful Enterprise Management software. Other options include integrated ATM and POS Transaction modules for banking and retail customers.

An built-in back-up battery and intelligent hardware and software watchdog circuitry keep this DVR functioning during power brown outs. The robust Linux Operating System is stored in flash memory, ensuring the unit reboots quickly if the power fails completely. This also allows internal hard disks to be provisioned as needed – either no drives in a video server application; or up to four high-capacity drives in an extended video archiving application, or for mirrored internal storage.

The unique docking station design provides technicians with direct access to the hard drives without undoing cables or connectors, making installation and maintenance of the unit much simpler and more cost effective. Two rear-panel PCI slots support a range of optional components for tailoring the DVR to individual requirements. Audio, alarm, switch and serial data inputs and outputs, along with added storage interfaces, can be ordered as required. A USB serial port also enables rapid video export or the connection of external devices such as a modem for dial-up system access.



# Specifications



## 4210 DVR

**Description:** The 4210 DVR is a networked digital video recorder with inputs for 16 cameras, optional alarm and audio I/O ports, support for a number of PCI and USB compatible devices, and high-capacity internal and external storage. In its diskless configuration, the unit functions as a video server.

**Video Recording:** Total of 60 fps for NTSC inputs, 50 fps for PAL inputs; CIF, 4CIF resolution supported; the following rates at CIF setting:

NTSC Inputs	PAL Inputs
60 fps across 16 inputs (3.75 fps per input, 15 fps per 4 inputs)	50 fps across 16 inputs (3.125 fps per input, 12.5 fps per 4 inputs)

H.263 (MPEG-4) video compression; up to 5 quality settings; average image size ~2 KB/frame; video signal loss detection; all configurable per camera

**Video (Monitor) Output:** BNC-terminated NTSC or PAL output; event-driven video switcher functionality, selectable 16:1 composite with dwell; controlled/overridden by time/VMD/alarm video, from any camera; all inputs also offer 75Ω/hi-Z switch for loop-through capability

**Alarms/Relays:** Optional module<sup>1</sup>; 16 current loop inputs, supporting open/closed/cut detection; 4 relay switch outputs (30 VDC, 1 Amp); programmable event driven; programmable increase of frame rate on event, to maximum available per camera

**Audio Channels:** Optional PCI card<sup>2</sup>; 6 line-level I/O channels; two-way half-duplex communication, synched to audio; 4 quality settings per channel

**Data Connectivity:** Optional PCI card<sup>2</sup>; 4 RS-232 ports or 2 RS-485 ports per card, for ATM/POS/PTZ support

**Network Interface:** Ethernet: RJ-45 10/100 BaseT main connection; PSTN via optional USB modem/terminal adapter; DHCP enabled; optional SNMP configuration; NTP time synchronization

**Recording Modes:** Continuous, scheduled or driven by external event – alarm, motion detection (full view or masked, with sensitivity control), ATM/POS transaction; configurable pre- and post alarm recording

**Video Streaming:** Unlimited streams; bandwidth limiting at global or camera-specific bit or frame rates; unique adaptive stream for low-bandwidth networks

**Video Storage:** Up to 4 high-capacity, easily removed, internal IDE hard-drives; internal mirroring option

**Video Archive:** Extensive, fault-tolerant, external RAID<sup>3</sup> storage through optional SCSI adaptor<sup>2</sup>

**Audit Trail:** Configuration, database searches, communications activity, live and recorded video requests, problem acknowledgement; 6 month capacity with circular logging

**Dimensions:** 3.5 in. (h) x 17.5 in. (w) x 20 in. (d) / 8.9 cm (h) x 44.5 cm (w) x 50.8 cm (d); Rack (2U high), wall or desk mount

**Weight:** 27 lbs / 12.2 kg shipping weight (unit plus docking station); plus 1.25 lbs / 0.6 kg each hard-drive

**Operating Temperature:** 50-105 °F / 10-40 °C; thermally controlled cooling; maximum 255 BTU generated per hour (system plus 4 hard-drives)

**Electromagnetic:** FCC Part 15 Class A; EN55022 Class A Emissions; EN55024, EN50130-4, EN61000 Immunity compatibility

**Power Supply:** Internal 115/230 VAC (auto-sensing); consumption 75 W maximum (system plus 4 hard-drives)

**Safety:** UL 60950; CSA C22.2 No.950; UL 1950; EN60950 LVD

Notes: <sup>1</sup> One module per DVR.  
<sup>2</sup> Total of 2 PCI slots available.  
<sup>3</sup> Random Array of Independent Disks.

© 2006. March Networks Corporation. All rights reserved. Information in this document is subject to change without notice. MARCH NETWORKS, R<sup>5</sup>, and the MARCH NETWORKS and R<sup>5</sup> logos, are trademarks of March Networks Corporation. All other trademarks are the property of their respective owners.  
Printed in Canada. 2854 PN 060-2784-00-F

North America: 1 800 563 5564  
Latin America: 613 591 8181  
Europe, Middle East and Africa: +44 1 291 436027  
Asia Pacific: +852 2508 9780  
www.marchnetworks.com

**March Networks**  
Corporate Headquarters  
Tower B, 555 Legget Drive  
Ottawa, Ontario Canada  
K2K 2X3 613 591 8181

