

High-Speed Data Module (HDM)

The High-Speed Data Module (HDM) is a circuit data module for Cisco IGX 8410, IGX 8420, and IGX 8430 wide-area switches.

Data interfaces are protocol transparent— asynchronous, binary synchronous, and bit synchronous protocols are supported with no impact on host or terminal software.

The HDM uses a 68000 processor to support the following functions:

- Repetitive Pattern Suppression (RPS)
- Flexible clocking
- Monitoring and control of data leads
- Lead-triggered jobs

Repetitive Pattern Suppression
On synchronous and asynchronous connections (up to 128 kbps), RPS enhances bandwidth efficiency by removing repetitive patterns from the bit stream and then reconstructing the bit stream at the receiving end.

Flexible Clocking
The HDM provides for external or internal clocking on a port-by-port basis. The clocking circuitry measures the frequency of incoming clocks and adjusts the outgoing clock at the other end of the network. This is useful when connecting remote devices to an IGX 8400 network.

Monitoring and Control of Data Leads
This feature enables you to view real-time control leads on any data port of any node from the network management station, thereby providing a powerful means of configuration and problem resolution. You can also configure an IGX 8400 switch to use a change in lead on a circuit data interface at one end of a connection to condition the interface at the other end of the network.

Lead-Triggered Jobs

Lead-triggered jobs enable you to dynamically set up bandwidth-on-demand connections across the WAN. You can execute pre-defined scripts upon command, at a preset time interval, or by failure or repair of a trunk or channelized port. These configurable jobs are ideal for establishing video connections and for disaster recovery applications.

Technical Specifications

Hardware

- 68000 processor
- 128 kbytes of flash memory
- 512 kbytes of RAM

Physical Layer

Description	V.35	RS449/422/X.21	RS232C/D/V.24
Port Speed	1.2 kbps–1.344 Mbps	1.2 kbps–1.344 Mbps	1.2 kbps–1.344 Mbps
Data Clocking	Synchronous and isochronous clocking. Normal, looped, and split clock configurations.	Synchronous and isochronous clocking. Normal, looped, and split clock configurations.	Synchronous and isochronous clocking. Normal, looped, and split clock configurations.
Connector Type	34-pin MRAC type (Winchester), female	DB37 Subminiature, female	DB25 Subminiature, female
Interface Type	DTE or DCE	DTE or DCE	DTE or DCE

Physical/Electrical Specifications

Dimensions	Front card 15.25 x 16.25 in.; Back card 6.5 x 16.25 in.
Weight	Front card 8 lb (3.6 kg); Back card 4 lb (1.8 kg)
Input Power	–48V DC
Power Consumption	51W
Electrical and Safety Standards	<ul style="list-style-type: none"> • FCC Part 15 • Bellcore GR1089-CORE • IEC 801-2, 801-3, 801-4, 801-5, 825-1 (Class 1) • EN 55022, 60950 • UL 1950



Corporate Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100

European Headquarters
Cisco Systems Europe
11, Rue Camille Desmoulins
92782 Issy-les-Moulineaux
Cedex 9
France
www-europe.cisco.com
Tel: 33 1 58 04 60 00
Fax: 33 1 58 04 61 00

Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-7660
Fax: 408 527-0883

Asia Pacific Headquarters
Cisco Systems Australia, Pty., Ltd
Level 17, 99 Walker Street
North Sydney
NSW 2059 Australia
www.cisco.com
Tel: +61 2 8448 7100
Fax: +61 2 9957 4350

Cisco Systems has more than 200 offices in the following countries and regions. Addresses, phone numbers, and fax numbers are listed on the
Cisco Web site at www.cisco.com/go/offices

Argentina • Australia • Austria • Belgium • Brazil • Bulgaria • Canada • Chile • China PRC • Colombia • Costa Rica • Croatia • Czech Republic • Denmark • Dubai, UAE
Finland • France • Germany • Greece • Hong Kong SAR • Hungary • India • Indonesia • Ireland • Israel • Italy • Japan • Korea • Luxembourg • Malaysia • Mexico
The Netherlands • New Zealand • Norway • Peru • Philippines • Poland • Portugal • Puerto Rico • Romania • Russia • Saudi Arabia • Scotland • Singapore • Slovakia
Slovenia • South Africa • Spain • Sweden • Switzerland • Taiwan • Thailand • Turkey • Ukraine • United Kingdom • United States • Venezuela • Vietnam •