

Subscriber Networks

Explorer® 4250™ Home Gateway

Description

Scientific Atlanta's Explorer® 4250™ Home Gateway offers a cost-effective solution for providing subscribers with a gateway to multiple revenue-generating services. By merging "home gateway" computing power with broadband digital video services, the 4250 can deliver a broad range of entertainment, information, and communications services.

With its internal DOCSIS® cable modem, the 4250 provides a high-speed data path for boosting performance of interactive TV applications. The DOCSIS modem delivers significantly faster out-of-band (OOB) data for interactive applications as compared to the DAVIC OOB path.

To meet the demands of existing and future network configurations, the 4250 offers power, capacity, and compatibility. The combination of an integrated internal DOCSIS cable modem and the DAVIC OOB channel supports a broad range of entertainment, information, and communications services. The 72 MB of application and program memory, along with the dual 250 MHz SPARC microprocessors, manage multiple program tasks and applications with speed and power. The USB port offers fast interconnectivity to consumer peripherals. The 4250 is also backward compatible with existing Scientific Atlanta digital set-tops and headends.



Standard Features

- Integrated DOCSIS Cable Modem
- 500 MIPS with Dual CPUs
- 32 MB Applications DRAM
- Composite Audio/Video Outputs
- Back Panel USB Port
- Ability to Process All Analog and Digital Services
- IR Port for VCR Commander™ Service
- Smart Card Reader

Optional Features

- Additional USB Port, Front Panel
- Ethernet Port
- Expanded Memory
- IR Blaster Cable
- AT8560™ AllTouch® Universal Remote Control

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Front Panel



Front Panel	
Controls	IR Receiver, 10 Buttons: Power, Vol+, Vol-, Ch+, Ch-, Select, Guide, Info, Exit, Settings
Connections	Smart Card Reader, USB 1.1 Host (optional)
Indicators	Power, Channel Number, Time of Day, Message, BYPASS
Branding	Provision for Service Provider Branding
Front Panel—Optional	
Connection	USB Port

Back Panel



Rear Panel	
Connections—In	Cable In
Connections—Out	Cable Out, Audio L/R, Digital Audio, Video, S-Video, IR, USB Port
Power Input	Polarized 2-prong modular cord plug, 120 VAC, 60 Hz, 40 W maximum
Power Output	Polarized 2-prong outlet, at input line voltage, 400 W maximum, software controlled
Labels	Serial Number and RF MAC Address with bar code

Specifications

Tuning and Decoding	
Analog and Digital Service Tuner	Allows both analog and digital channels to be tuned and displayed
Dual Audio Outputs with Composite Video Output	Allows simultaneous connection to the audio inputs on the TV, as well as the audio and video inputs on the VCR
Enhanced Graphics Engine	<ul style="list-style-type: none"> Displays up to 65,000 colors simultaneously Enables high-resolution 640 x 480 IPG graphics while simultaneously scaling MPEG-2 video
Reverse path Data Transmitter for DOCSIS and DAVIC Communication	<ul style="list-style-type: none"> Allows IP-based, real-time, two-way communication between the 4250 and the service provider's headend Supports interactive services such as <i>anything</i>-On-Demand (xOD), video-on-demand (VOD), and subscription VOD (SVOD)
MPEG-2 MP@ML Digital Video Decompression	<ul style="list-style-type: none"> Allows decompression and presentation of audio and video Delivers video resolutions up to 720 x 480
AC-3 Digital Audio and Part 3 Audio Support	Supports leading digital audio standards
Improved Automatic Scaling of MPEG-2 Video for the Interactive Program Guide (IPG) Window	Scales MPEG-2 video for optimal viewing in the IPG window
DOCSIS Cable Modem, Internal	Implements the Baseline Privacy Interface and DOCSIS SNMP MIBs. The upstream transmitter can send QPSK and 16-QAM bursts to any headend CMTS that implements DOCSIS 1.1 specifications
BTSC/SAP Decoder	Provides stereo sound on analog channels through the baseband left and right outputs
S/PDIF Digital Audio Interface	Supports interconnection with surround sound receivers
Integrated VCR Commander Service	Automates the recording of selected video programs; requires IR Blaster cable

Conditional Access	
PowerKEY® Conditional Access System	Secures digital services using symmetric encryption algorithm for content protection and strong authentication and digital signature for entitlement delivery
PowerTV® Operating System with HTML Client Engine	<ul style="list-style-type: none"> Offers extensive operating system and open Application Programming Interfaces (APIs) to support native applications and third-party middleware applications Allows upgrades using a network download

Security	
Internal Security Microprocessor	Provides hardware-assisted conditional access functions within a tamper-resistant package
Smart Card Reader	Supports third-party conditional access smart cards as well as the ability to upgrade the native PowerKEY security
Macrovision® Copy Protection Support (licensing not included)	Activation allows system operators to use Macrovision copy protection software that prevents subscribers from making clear analog copies of video services

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Specifications, continued

Processors	
Powerful SPARC Processors	Features two 250 MHz processors to perform tasks and applications quickly

Memory/Storage	
Over 72 MB Memory	<ul style="list-style-type: none">• 8 MB Flash• 32 MB Applications DRAM• 32 MB Media DRAM• 4 KB NVM
64 and 256 ITU J.83 Annex B QAM Support	Supports open standards for QAM delivery and demodulation

Dimensions	
Product (WxDxH)	12 in. x 9 in. x 3 in. (30.5 cm x 22.9 cm x 7.6 cm)
Product Weight	4.25 lbs (1.9 kg)
Carton (WxDxH)	16 in. x 11 in. x 14.5 in. (40 cm x 28 cm x 37 cm) (carton weight 1.5 lbs)
Weight Including Package (five units per carton)	25 lbs (11.3 kg)

Operating Conditions	
Placement/Ventilation	Locate with at least 2 inches of open space above and on each side
Room Temperature	32°F to 105°F (0°C to 40°C) during operation

Ordering Information

Contact your Sales Representative for product availability in your area.

Description	Product Photo	Part Number
Explorer 4250 Home Gateway		4012242
Optional IR Blaster Cable		735994
Optional AT8560™ AllTouch® Universal Remote Control		4016237

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