# **Subscriber Networks**



# Explorer<sup>®</sup> 3100HD High Definition DHCT

### Description

The Explorer<sup>®</sup> 3100HD Digital Home Communications Terminal (DHCT) combines highdefinition (HD) video capability with both analog and digital broadcast services including interactive videoon-demand (VOD), subscription VOD (SVOD), Web browsing, email and chat services.

This Explorer DHCT, scheduled for release in early 2002, decodes all 18 ATSC high-definition digital formats for HDTV presentation, as well as standard definition digital and analog video services, providing a compre-hensive and scalable solution to demand for high-quality HDTV video services.

The Explorer 3100HD DHCT upconverts all video services to 1080i resolution and passes the signal through its component outputs to the HDTV. The HD YPbPr component outputs make it simple to connect to almost any HDTV. Also, the Explorer 3100HD DHCT is fully backward compatible with existing Scientific-Atlanta digital set-tops and headends, and meets major industry standards including CableLabs/SCTE, ATSC, and DAVIC.

With its high-speed DAVIC cable modem, the Explorer 3100HD DHCT communicates instantly with the cable headend to promote real-time, interactive services such VOD, SVOD, Internet browsing, and email. A powerful 32-bit, 130 MHz RISC microprocessor speeds up applications and processing tasks for instantaneous results.

## Features

HD Component Video Connectors Composite Audio/Video Outputs

**Reverse Path DAVIC Data Transmitter** 

#### Compact Size MPEG-2 MP@HL Digital Video Decompression



Explorer 3100HD DHCT offers a comprehensive and scalable solution to demand for HDTV.

#### **Ordering & Availability**

Part Number: Software:	<ul> <li>749300</li> <li>OS 3.1 and SARA 1.21 (or 1.15)</li> </ul>
Standard Features:	<ul> <li>Single tuner</li> <li>130 MIPS</li> <li>16MB applications DRAM</li> <li>Front panel USB</li> <li>Integrated VCR Commander<sup>™</sup></li> <li>18 ATSC HDTV formats</li> <li>Supports all analog, standard-, and high-definition services</li> </ul>
Optional Features:	<ul> <li>Expanded memory</li> <li>RF bypass</li> <li>Web browser, email, real-time chat, and interactive games</li> </ul>
Available:	Scheduled for release early 2002

- Allows simple connection to most HDTVs
- Allows connection to TV or VCR for recording standard definition video
- Allows instantaneous, IP-based, "real-time" twoway communication between the DHCT and the headend
- Enables MSO to offer two-way services such as VOD, SVOD, Web browsing, email, chat
- Transmits up to 1.544 Mbps
- 14" X 9.5" X 2.75" (LXWXH)
- Allows transport and decompression of audio and video
- Delivers video resolution up to 1920 x 1080i

Dolby <sup>®</sup> AC3 <sup>®</sup> and Musicam Digital Audio	Supports leading digital audio standards
PowerKEY <sup>®</sup> Conditional Access System	<ul> <li>Secures digital services via an RSA encryption algorithm that mathematically matches pairs of keys</li> </ul>
PowerTV <sup>®</sup> Operating System with HTML Client Engine	<ul> <li>Provides Application Programming Interfaces (APIs) that enable client applications to use the resources managed by the operating system for delivering broadcast and interactive services</li> </ul>
Falsan d Orachina Facilità	Allows upgrades using a network download
Enhanced Graphics Engine	<ul> <li>Displays up to 65,000 colors simultaneously</li> <li>Enables high resolution 640 x 480 graphics</li> <li>Simultaneously scales standard definition MPEG- 2 video</li> </ul>
Powerful 32-bit RISC Processor	<ul> <li>Features 130 MHz (130 MIPs) processor speed to perform tasks and applications quickly</li> </ul>
Over 40 MBytes Memory	<ul> <li>4 MBytes Flash</li> <li>16 MBytes Applications DRAM</li> <li>4 MBytes Media DRAM</li> <li>16 Mbytes of HDTV Decoder memory</li> <li>2 KBytes Non-volatile machine memory</li> </ul>
64 and 256 ITU Annex B QAM Support	<ul> <li>Supports open standards for QAM delivery and demodulation</li> </ul>
Analog and Digital Service Tuner	<ul> <li>Allows both analog and MPEG-2 digital channels to be tuned and displayed</li> </ul>
Both Internal Security Microprocessor and Smart Card Slot	<ul> <li>Provides hardware-assisted conditional access options with capability to upgrade the security, if ever needed</li> </ul>
Macrovision <sup>®</sup> Copy Protection	<ul> <li>Allows the MSO to restrict unauthorized subscribers from copying digital services, such as pay-per-view and VOD</li> </ul>
Universal Serial Bus (USB) Interface	• Front panel access allows easy interconnection with other digital devices such as digital cameras
BTSC/SAP Decoder	<ul> <li>Provides stereo sound on analog channels via the composite baseband left and right outputs</li> </ul>
S/PDIF Digital Audio Interface	<ul> <li>Supports interconnection with Dolby Digital<sup>™</sup> Receivers</li> </ul>
Integrated VCR Commander™	<ul> <li>Automates the recording of selected video programs; requires optional IR Blaster Cable</li> </ul>
Custom Branding Insert	Allows you to brand the DHCT with your service or company identifier
Optional RF Bypass	<ul> <li>Allows the video signal to bypass through the DHCT directly to the TV</li> </ul>

Specifications, features, and product availability are subject to change without notice.



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