

SuperFlex® Pro Cinema Cache Server

Theatre Satellite Receiver

Applications

- Digital cinema
- DCP storage and distribution
- Private networks

Features

- DVB-S or DVB-S2
- 4 or 8 TB of storage capacity
- Support for Digital Cinema Content Distribution System
- Datacast XD included
- Net Manager addressable
- Web browser interface
- Dual L-Band inputs
- 4 NIC ports
- LMS vendor compatibility
- BISS Decryption
- Supports live event distribution and live events

Designed for high-speed Digital Cinema Package (DCP) distribution via satellite, the SuperFlex Pro Cinema Cache Server can meet the demands of DCP file delivery and transfer, as well as provide live event distribution.

Designed to meet the demands of digital cinema, the SuperFlex® Pro Cinema Cache Server maintains the highest possible throughput for DCP movie reception and transfer to the theatre management system. The ideal store-and-forward server for DCP distribution, it is flexible and comes with multiple storage configurations and decryption options, as well as dual tuners for built-in redundancy and support for live alternative content distribution in the theatre via an IP network.

Derived from IDC's award winning SuperFlex® Pro Video Receiver with two tuners to ensure reliable high-speed delivery of DCP files, the SuperFlex Pro Cinema Cache Server can receive two separate DCPs simultaneously. It provides multiple integration options for automated delivery of DCP content to any theatre library management system (LMS) or digital cinema server.

A Complete Digital Cinema Content Distribution System

The SuperFlex Pro Cinema Cache Server is part of IDC's Digital Cinema Content Distribution System which provides an end-to-end solution for DCP ingest, transmission and publishing.

Datacast XD Content Delivery

The SuperFlex Pro Cinema Cache Server includes IDC's Datacast XD for high-speed guaranteed file delivery including application FEC and file reconstruction features built-in.

Flexible Storage

Available with four (4) or eight (8) terabytes of storage in a compact 1RU form factor, the receiver provides high-density storage for DCPs.

Wide Variety of Inputs

L-Band (DVB-S or DVB-S2) with PES or IP transport, and IP-over-Ethernet provide multiple connectivity options.

Flexible Configurations

The SuperFlex Pro Cinema Cache Server can be deployed in either a one-way, two-way or hybrid satellite/terrestrial network. In addition, it can be configured for the delivery of live events (alternative content) via satellite transmission, including support for 2D and 3D live events with the Pro Cinema Event Player or existing IP video decoder.

TECHNICAL SPECIFICATIONS—SuperFlex Pro Cinema Cache Server

RF INPUT	
Number of Inputs	2
Frequency Range	950 to 2150 MHz
Frequency Tuning Steps	Synthesized 1 Hz steps
AFC Range (drift tracking)	+2 MHz maximum
Maximum Input Level	-35 to -65 dBm
Connector	Type-F, female
Impedance	75 ohms, unbalanced
LNB DC Power	+18 VDC maximum (horizontal polarity), or +13 VDC at 500 mA (vertical polarity) center conductor positive, short circuit protected
LNB Requirements	<ul style="list-style-type: none"> DRO type for high data rates, stability +2 MHz maximum PLL type for low data rates, stability +25 kHz maximum
DVB-S MODE	
Symbol Rate	1 to 45 Ms/s
Modulation	QPSK
FEC	DVB concatenated, Viterbi and Reed-Solomon 204/188, 1/2, 2/3, 3/4, 5/6, 7/8
Alpha Factor	0.35
DVB-S2 MODE	
Symbol Rate	1 to 30 Ms/s
Modulation	QPSK/8PSK Normal blocks 64,800 bits only
FEC Type	Concatenated, LDPC and BCH, QSPK 1/4, 1/3, 2/5, 1/2, 3/5, 2/3 3/4, 4/5, 5/6, 8/9, 9/10 (9/10 for normal blocks only) 8PSK 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (9/10 for normal blocks only)
Alpha Factor	0.20, 0.25, 0.35
NETWORK AND TRANSPORT	
<ul style="list-style-type: none"> Fully addressable and controllable via Net Manager MPEG-2 Transport (ISO/IEC 13818) per ETSI EN 301 192 Filters up to 250 PIDs MPE and ULE decapsulation 	
STATUS AND CONTROL INTERFACES	
<ul style="list-style-type: none"> Web browser based status and control utilizes Ethernet NET connector, plus SNMP Password protected, allows for local setting of configuration parameters LCD display/keypad Terminal interface also available on ASYNC Port for setting RF parameters and IP configuration 	

STORAGE	
SFX-PC-CS	4 TB
SFX-PC-CS-XTR	8 TB
FRONT PANEL INDICATORS	
LCD display/keypad	Provides metrics and set up menus
Lock LED	Indicates locked or unlocked status of RF demodulator
Status LED	Indicates normal operation or fault and status of LNB
Control LED	Indicates authorization and data activity of the Net Manager channel and the Async port
REAR PANEL CONNECTORS/INDICATORS	
Network Ports (4)	<ul style="list-style-type: none"> Connector Type: RJ-45 Ethernet Electrical Interface: 3—10/100/1000 Base-T and 1—10/100 Base-T IP Data: Up to 160 Mb/s output SNMP and ICMP
ASYNC Port	<ul style="list-style-type: none"> Connector Type: DE-9P Electrical Interface: RS-232 Asynchronous Rate: Terminal interface at 9.6 kb/s or data at 300 b/s to 115.2 kb/s
ASI Outputs (2)	<ul style="list-style-type: none"> Connector Type: BNC Female Electrical Interface: DVB-ASI Filtering: Complete DVB transport stream or up to 250 filtered PIDs Packet Size: 188 bytes Data Rate: Up to complete transport rate
POWER REQUIREMENTS	
Supply Voltage	100 to 240 VAC, +6%, -10%, 50 or 60 Hz
Power Consumption	110 Watts maximum
PHYSICAL PARAMETERS	
Chassis	1U rackmount
Dimensions (H, W, D)	4.5 cm x 48 cm x 36 cm (1.75" x 19" x 14")
Weight	6 kg (14 lbs.)
ENVIRONMENTAL CONDITIONS	
Operating Temperature	0° to 45° C (32° to 113° F)
Storage Temperature	-20° to 70° C (-4° to 158° F)
Humidity	Maximum 90% relative, non-condensing
DECRYPTION OPTIONS	
BISS 1	
DCP RECEIVE PERFORMANCE	
Receives from Distribution Manager up to 60 Mb/s*	

*Under IDC Lab Conditions



International Datacasting Corporation is a technology provider for the world's premiere broadcasters in radio, television, data and digital cinema. IDC's products and solutions are in demand for radio and television networks, targeted ad insertion, digital cinema, 3D live events, VOD, and IPTV. IDC is headquartered in Ottawa, Canada, has installations in over 100 countries, and a strong world-wide network of value-added partners and distributors. For more information visit: www.datacast.com.

HEADQUARTERS: 50 Frank Nighbor Place, Kanata, ON Canada K2V 1B9

Tel: +1 613.596.4120

Copyright © 2015 International Datacasting Corporation. Information in this document is subject to change without notice. All other trademarks are property of their owners.

Datasheet version #8, updated November 2015

**INTERNATIONAL
DATACASTING**

www.datacast.com