

# SuperFlex® Pro Video Series

## Applications

- HDTV Distribution
- 3D Video
- IPTV
- Digital cinema
- News gathering
- TV distribution

## Features

- 2, 4 or 8 TB Storage
- DVB-S, DVB-S2, Ethernet or ASI input
- HD and SD
- Digital video/audio outputs
  - HD-SDI and SDI
  - HDMI
  - SDI Embedded audio
  - S/PDIF multi-channel audio
  - AES/EBU
- MPEG-2 and MPEG-4 AVC Video
- Supports IP and Transport Stream Video
- AC3, AAC MPEG audio
- HDD for content storage
- Datacast XD Client included
- Net Manager addressable

## Options

- SENSIO® Hi-Fi 3D Support
- Dolby 3D Color Correction

## Video Satellite Receivers

The SuperFlex Pro Video Series provides the power and flexibility required to address the demanding requirements of IPTV, news, sports and movie broadcasters in large and small networks where cost effective digital interconnectivity and quality is important.

The SuperFlex Pro Video Series provides increased reliability, saves on rack space and is easy to configure and install. The receiver provides superior performance and decryption and can output up to 160 Mb/s of IP traffic.

### 3D Video Options

The receiver can decode 3D video and includes Dolby® 3D Color Correction for digital cinema applications. The receiver provides separate Left and Right eye video outputs, each on its own HD-SDI output for direct connection to 3D digital projectors.

### Professional Video Decoding

The SuperFlex Pro Video Series can decode HD or SD video encoded with MPEG-2 and MPEG-4 AVC (H.264) with SDI, HD-SDI, HDMI outputs available.

### Leading Edge Audio Decoding

Audio codecs are included for MPEG-4 AAC-LC, MPEG Layer I, II and III and more to ensure high performance mono and stereo audio embedded in the SDI/HD-SDI, and as S/PDIF, AES/EBU and balanced analog. Multi-channel sound is available as pass-through in S/PDIF, AES/EBU.

### Wide Variety of Inputs

L-Band (DVB-S/S2) with PES or IP transport, ASI, Transport Stream file and IP-over-Ethernet inputs provide maximum flexibility.

### Flexible Configurations

Choose from DVB-S or DVB-S2. The receiver offers symbol rates from 1 to 45 MS/s.

### IDC Datacast XD™ Client Included

The Datacast XD client is included inside every receiver to facilitate the downloading of files to the hard drive.

### Conditional Access to Protect Content

A good security strategy utilizes multiple layers of protection. The SuperFlex Pro Video Series includes multiple options for security. Conditional Access is included in every receiver to ensure the security of the content. The Datacast XD Client can be used to secure file based content, and BISS Decryption secures the transport stream.

# TECHNICAL SPECIFICATIONS—SuperFlex Pro Video Series

Model	Storage	RF Tuners	Symbol Rate		Decryption Options
			DVB-S	DVB-S2	
Pro Video	2 TB	2	QPSK: 1 to 45 MS/s	QPSK/8PSK: 1 to 30 MS/s <i>Normal frames 64,800 bits only</i>	BISS
Pro Video XTR	4 TB				
Pro Video XTR 2	8 TB				

## VIDEO AND AUDIO CAPABILITIES

Video Decoder	MPEG-4 AVC/H.264 @ 4.1 (up to 40 Mb/s) MPEG-2 MP@HL (up to 72 Mb/s) 4:2:0 decoding 4:2:2 upconverted output
Video Resolutions	1080i 60, 1080i 59.94, 1080i 50 1080 sF 25, 1080 sF 29.97, 1080 sF 30 720p 60, 720p 59.94, 720p 50 PAL NTSC
Multi-standard Decoder	CABAC and CAVLC decoding intra/inter prediction modes/block I, P, and B picture types
Audio Decoder	Dolby Digital AC-3 AAC MPEG Layer I, II and III
DVB Subtitles	ETSI EN 300 743 v1.2.1
Still Image Decoder	BITMAP
Video Outputs	2 HD-SDI, SD-SDI, 1 HDMI
Audio Output	Within HD-SDI/SD-SDI SPDIF Multi-channel Balanced Analog Audio AES/EBU
Inputs	Satellite, ASI Hotlink, IP on LAN (Max 20 Mb/s IP Transport Stream)

## 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	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	See chart.
Modulation	See chart.
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	See chart.
Modulation	See chart.
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

## FRONT PANEL INDICATORS

LCD display	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 NCC channel and the ASYNC port



## REAR PANEL CONNECTORS/INDICATORS

Two Net Ports	<ul style="list-style-type: none"> <li>Connector Type: RJ-45 Ethernet</li> <li>Electrical Interface: 1—10/100/1000 Base-T and 1—10/100 Base-T</li> <li>IP Data: Up to 160 Mb/s output</li> </ul>
ASYNC Port	<ul style="list-style-type: none"> <li>Connector Type: DE-9P</li> <li>Electrical Interface: RS-232</li> <li>Asynchronous Rate: Terminal interface at 9.6 kb/s or data at 300 b/s to 115.2 kb/s</li> </ul>
ASI Output	<ul style="list-style-type: none"> <li>Connector Type: 2 BNC Female</li> <li>Electrical Interface: DVB-ASI</li> <li>Filtering: Complete DVB Transport Stream or up to 250 filtered PIDs</li> <li>Packet Size: 188 bytes</li> <li>Data Rate: Up to complete Transport Rate</li> </ul>

## NETWORK AND TRANSPORT

- Fully addressable and controllable via Net Manager
- MPEG-2 Transport (ISO/IEC 13818) per ETSI EN 301 192
- MPTS over IP
- Filters up to 250 PIDs
- MPE and ULE decapsulation

## STATUS AND CONTROL INTERFACES

- Web browser based status and control utilizes Ethernet IP connector, plus SNMP (full MIB support)
- 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 and displaying metadata

## POWER REQUIREMENTS

Supply Voltage	100 to 240 VAC, +6%, -10%, 50 or 60 Hz
Power Consumption	180 Watts maximum

## PHYSICAL PARAMETERS

Chassis	1RU rackmount
Dimensions (H, W, D)	90 cm x 48 cm x 36cm (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

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