

SUPERFLEX

The IDC SUPERFLEX family of products — true end-to-end solutions for the distribution of broadband multimedia content via satellite

HEAD END | **RECEIVERS** | MANAGEMENT & CONTROL | CONTENT DISTRIBUTION

SFX MEDIA SERVER SERIES

DVB/IP DIGITAL MEDIA RECEIVER/DECODER



Applications:

- Digital signage
- Distance learning
- On-demand programming
- Streaming media

Features:

- DVB-S, DVB-S2
- MPEG2 and MPEG4 video
- Local content insertion
- Time scheduled programming
- Event scheduled programming
- Playlist support
- Still image playback
- HDD for content storage and playout
- Datacast XD included
- NetManager addressable
- Up to 250 PIDs
- Apache Web Server
- VOD server
- Local multicast stream generation
- Optional harddrive video decoder

The SFX Media Server series of satellite receiver/decoders are DVB-S/DVB-S2 compliant and designed to receive and decode both live and/or file-based programming. The receivers provide the power and flexibility required to address the demanding requirements of multimedia applications in large and small networks where cost-effective digital interconnectivity is very important. Several decryption options are available to protect the content.

SFX Media Server series includes:

Managed Content Playback

Video, audio and image based files can be managed remotely and/or locally to seamlessly transition programming between live and stored content. This allows the content provider to distribute a unique mix of programming on a per client basis. Live and stored content can be played locally and also streamed to multiple downstream clients on an independent playlist basis.

On Demand Programming

Live and stored programming can be accessible on demand by selecting the desired programming on a virtual channel guide. This is ideal for distance learning/training networks.

Video and Audio Decoding

Video and audio codecs are included for MPEG4, MPEG2, MPEG Layer II & III, AAC and more to ensure high performance.

Wide Variety of Inputs

L-band DVB-S or DVB-S2 with IP transport and IP-on-ethernet input interfaces ensure ease of interfacing.

Flexible Configurations

Choose from DVB-S or DVB-S2. The several versions of receivers offer symbol rates as low as 100ks/s and as high as 45Ms/s. For details see the table on the reverse.

Datacast XD Included

The Datacast XD Content Distribution and Management software client is included inside every receiver/decoder to facilitate the downloading of files.

Conditional Access to Protect Content

A good security strategy utilizes multiple layers of protection. The SFX Media Server receivers include multiple options for security. Decryption capabilities are included in every receiver to ensure the security of the content. Datacast XD is used to secure IP streams and file based content. FlexKey can secure the transport stream. Irdeto's IP security system Gigacrypt can secure the IP streams.





VIDEO/AUDIO CAPABILITIES

| | |
|----------------------|--|
| Video Decoder: | MPEG-4 AVC/H.264 (up to 2.5 Mb/s) MPEG-2 MP@HL (up to 6 Mb/s) |
| Audio Decoder: | MPEG-4 High Efficiency AAC MPEG-4 AAC-LC MPEG Layer II and III |
| Still Image Decoder: | JPEG, PNG, GIF |
| Video Outputs: | Composite (NTSC or Pal) VGA |
| Audio Output: | Analog Stereo |
| Inputs: | Satellite IP on LAN |
| Playlists: | 1 Local Video/Audio playback 4 Streams Forwarded |

RF INPUT

| | |
|-----------------------------|---|
| 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 Requirement: | 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 table |
| FEC Type: | DVB concatenated, Viterbi Reed-Solomon Viterbi Reed-Solomon 204/188 |
| Modulation: | QPSK 1/2, 2/3, 3/4, 5/6, 7/8 |
| Alpha Factor: | 0.35 |

DVB-S2 MODE

| | |
|---------------|--|
| Symbol Rate: | See table |
| FEC Type: | concatenated, LDPC & BCH |
| Modulation: | QPSK 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 8PSK 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 16APSK 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 |
| Alpha Factor: | 0.20, 0.25, 0.35 |

FRONT PANEL INDICATORS

| | |
|--------------|--|
| LCD display: | Provides metrics and setup 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 NetManager control channel and the ASYNC port |

SFX MEDIA SERVER

REAR PANEL CONNECTORS/INDICATORS

2 Net Ports

| | |
|-----------------------|--|
| Connector Type: | RJ-45 Ethernet |
| Electrical Interface: | one 10/100/1000 Base-T and one 10/100 Base-T |
| IP Data: | Greater than 80 Mb/s output (Configuration dependent) IGMP, SNMP and ICMP |

Async Port/Terminal Port

| | |
|-----------------------|---|
| Connector Type: | DE-9S |
| Electrical Interface: | RS-232 |
| Asynchronous Rate: | Terminal Interface at 9.6 kb/s or data at 300 b/s to 115.2 kb/s |

POWER REQUIREMENTS

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|--------------------|--|
| Supply Voltage: | 100 to 240 VAC, +6%, -10%, 50 or 60 Hz |
| Power Consumption: | 40 Watts maximum |

PHYSICAL PARAMETERS

| | |
|-------------|--|
| Chassis: | 1U rackmount (Desktop kit available) |
| Dimensions: | 1.75 in H x 19 in W x 8.5 in D (4.4 cm H x 21.5 cm W x 22 cm D) |
| Weight: | Less than 5.5 lbs (2.5 kg) |

ENVIRONMENTAL CONDITIONS

| | |
|------------------------|--------------------------------------|
| Operating Temperature: | 0 °C to +50 °C |
| Storage Temperature: | -20 °C to +70 °C |
| Humidity: | Maximum 90% relative, non-condensing |

| SFX Demodulator options | |
|---|--|
| 01 series SFX2101F/R SFX3101F/R | DVB-S QPSK: 1 to 45 Ms/s DVB-S2 QPSK/8PSK: 1 to 30 Ms/s Normal blocks 64, 800 bits only |
| 02 series SFX2102F/R SFX3102F/R | DVB-S QPSK: 1 to 45 Ms/s DVB-S2 QPSK/8PSK/16APSK: 0.1 to 45 Ms/s Normal blocks 64, 800 bits Short blocks 16, 200 bits ACM/VCM optional |
| 03 series SFX2103F/R SFX3103F/R | DVB-S QPSK: 128 ks/s to 45 Ms/s |
| 00X series SFX2100X SFX3100X | No Demodulator Ethernet only input For terrestrial based infrastructure Upgradable |

| Decryption Options | |
|-----------------------------------|--------------------------------|
| F series SFX210XF/310XF | FlexKey offering 128bit AES |
| R series SFX210XR/310XR | Irdeto Cyphercast or Gigacrypt |

| Performance Options | |
|--|--|
| 2100 series SFX2100/2101/2102/2103 | Standard performance |
| 3100 series SFX3100/3101/3102/3103 | Enhanced performance For high CPU demand applications |

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