

IRD1518Plus

DIBVISION | DIBSYS

16x FTA Tuner to IP Gateway

DVB-S2 DVB-S2X DVB-C CABLE DVB-T TERRESTRIAL ATSC ISDB-T



IRD1518Plus-16 is a high-density, modular and FTA/BISS decryption professional TS processor equipped with 16 independent tuners, which can be either of DVB-T/ T2, DVB-S2X/S2/S, DVB-C, ATSC or ISDB-T types.

IRD1518Plus-16 DVB-S/S2/S2X Tuner to IP Gateway is a head-end interface conversion device and Routes Any or All Transport Streams via IP Output Port by SPTS/MPTS channels, and support optional two different tuners input in one device.

It is integrated with tuner demodulation (or ASI input) and gateway function, which can demodulate the signal from 16 tuners into IP package, or directly convert the TS from DVB-ASI, then output the IP package through different IP address and ports. BISS function is also embedded for tuner input to descramble your tuner input programs.

IRD1518Plus-16 enables an all-IP headend architecture, resulting in a more scalable and lower-cost transition to IP-based services. This is an ideal solution for environments where you have a large number of air Channel, and used largely to Medium-Scale IPTV, Hotel, entertainment facilities, or any kinds of Source signals convert to Cable TV broadcast environments in limited budget severely.

Features

- 16*FTA Tuners Input. Supports variety of input DVB-S/S2/S2X/T2/T/C/ISDB-T/ATSC options
- Support DisEqc function
- 16 MPTS or 512 SPTS output (MPTS and SPTS output switchable)
- BISS-0, BISS-1 and BISS-E decryption
- IP Output: IP-UDP, RTP/RTSP
- SPTS Mode enable One MPEG-TS to Distribute Two Separate Multicast streams Output In GbE1, GbE2 Ports
- MPTS Mode enable One MPEG-TS to map One Multicast streams outputs In either GbE1 or GbE2 Port
- SPTS Mode allow PID filtering, re-mapping, PSI/SI to rebuilding and editing
- optional two different tuners input in one device, like DVB-S2/S2X + DVB-T/T2, DVB-S2/S2X + ISDB-T, etc.
- Easy-to-Use System Management via Web-GUI
- Breakthrough price and Quality
- For professional 24/7 Non stop operation
- High density, compact 1-RU platform saves rack space and reduces operating cost

Main Application

- Converting the content of 16*FTA satellite transponders to IP streaming
- Upgrade all your analog Head-ends to digital TV Solution
- Enterprise, Hotel, campus, hospital, Public Place
- Huge FTA Channels to collect in Limited budget

TECHNICAL SPECIFICATIONS

Input Interfaces

16 FTA Tuners In/Loop Out, selectable DVB-S/S2/S2X, DVB-T(T2), DVB-C, ISDB-T, ATSC
 F-female type Connector
 2 Separate DVB-ASI
 75 Ω , BNC type, 188Bytes, ≅150Mbps
 ASI bitrate 200Mbit/s
 Output Level 800mVpp Nominal

DVB-S/S2 Mode Version 1

Input Frequency 950-2150Mhz
 Symbol rate 1~45Mbauds
 FEC Demodulation 1/2, 2/3, 3/4, 5/6, 7/8(DVB-S QPSK)
 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
 (DVB-S2 QPSK/8PSK)
 Demodulation Mode QPSK, 8PSK(Only for DVB-S2)

DVB-S/S2/S2X Mode Version 2

DVB-S
 Input Frequency 950-2150Mhz
 Symbol rate 0.5~45Mbauds
 Signal Strength -65 ~ -25dBm
 FEC Demodulation 1/2, 2/3, 3/4, 5/6, 7/8(DVB-S QPSK)
 Demodulation Mode QPSK
 Max input bitrate ≤125 Mbps

DVB-S2

Input Frequency 950-2150Mhz
 Symbol rate QPSK/8PSK /16APSK :0.5~45 Msps
 32APSK: 0.5~34Msps;
 FEC Demodulation 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
 32APSK: 3/4, 4/5, 5/6, 8/9, 9/10
 Demodulation Mode QPSK, 8PSK, 16APSK, 32APSK
 Max input bitrate ≤125 Mbps

DVB-S2X

Input Frequency 950-2150Mhz
 Symbol rate QPSK/8PSK /16APSK :0.5~45 Msps
 8APSK: 0.5~40Msps
 32APSK: 0.5~34Msps;
 FEC Demodulation 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
 8APSK: 5/9-L, 26/45-L
 16APSK:2/3, 3/4, 4/5, 5/6, 8/9, 9/10, 1/2-L, 8/15-L, 5/9-L,
 26/45, 3/5, 3/5-L, 28/45, 23/36 , 2/3-L, 25/36, 13/18, 7/9,
 77/90
 32APSK: 3/4, 4/5, 5/6, 8/9, 9/10, 2/3-L, 32/45, 11/15, 7/9
 Demodulation Mode QPSK, 8PSK, 8APSK, 16APSK, 32APSK
 Max input bitrate ≤125 Mbps

DVB-T/T2 Mode

Frequency Range 30MHz-1000Mhz
 Bandwidth 6Mhz, 7Mhz, 8Mhz
 Level -87 ~ -20dBm
 Constellation QPSK, 16QAM, 64QAM,
 256QAM(Only DVB-T2)
 FEC Demodulation DVB-T: 1/2, 2/3, 3/4, 5/6, 7/8
 DVB-T2:1/2, 3/5, 2/3, 3/4, 4/5, 5/6
 Guard Interval DVB-T: 1/4, 1/8, 1/16, 1/32
 DVB-T2:1/4, 5/32, 1/8, 5/64, 1/16, 1/32, 1/64, 1/128

DVB-C Mode

Input Frequency Range 30 ~ 1000MHz
 Input Level 51~75dBμV
 Symbol Rate 1~7MBaud
 QAM Encoding ITU-TJ.83 Annex A(DVB), Annex B, AnnexC
 Constellation 16QAM, 32QAM, 64QAM, 128QAM, 256QAM
 Bandwidth 6MHz, 7MHz, 8MHz

ISDB-T Mode

Input frequency range 30 ~ 900MHz
 Bandwidth 6MHz
 Constellation DQPSK, QPSK, 16QAM, 64QAM
 Interleave 0, 4, 8, 16
 Guard Interval 1/32, 1/16, 1/8, 1/4

Transmission Mode 2K, 4K, 8K (FFT)
 FEC (Code Rate) 1/2, 2/3, 3/4, 5/6, 7/8
 NOTE: Support to connect and receive any sources from DVB-C /T/T2/ISDB-T

ATSC Mode

Frequency range 50 - 860 MHz
 Key reference specification ATSC A/53
 Input level -34 to +40 dBmV
 Constellation 8-VSB
 Bandwidth 6Mhz

Input optional

Optional 1 16 tuners input +2 ASI input---SPTS output
 Optional 2 14 tuners input +2 ASI input --- MPTS output
 Optional 3 16 tuners input --- MPTS output

MPEG-TS Processing

IP mode MPTS, SPTS
Note:When Switch success, Please reboot device by hand
 Maximum PID Remapping 180 input per channel
 PID remapping by automatically or manually)
 PSI/SI(Valid in SPTS) Program Name, Program Number, Service Type,
 Service Provider, PMT/PCR/Video/Audio PID
 Note:In MPTS mode.Disable Configuration

Stream output

Dual GbE interfaces, RJ45 Port, Auto-negotiation
 GbE1, GbE2, ≅850Mbps Per Port
 MPEG-TS Over UDP and RTP/RTSP
 7x188 Bytes per TS packet
 Multicast/Unicast

MPTS mode

Filter Null Packet
 Each IP out Configurable mirroring per Tuner
 Numbers of MPTS:Up to 16
 Selectable ts out via GbE1 or GbE2 Port

SPTS Mode

TS out via GbE1 as Mirror of GbE2 Port
 Configurable two IP address (or port) out from one
 SPTS Simultaneously
 Numbers of SPTS: Up to 512

BISS descrambling

BISS-0, BISS-1 and BISS-E
 descramble individual program

System function

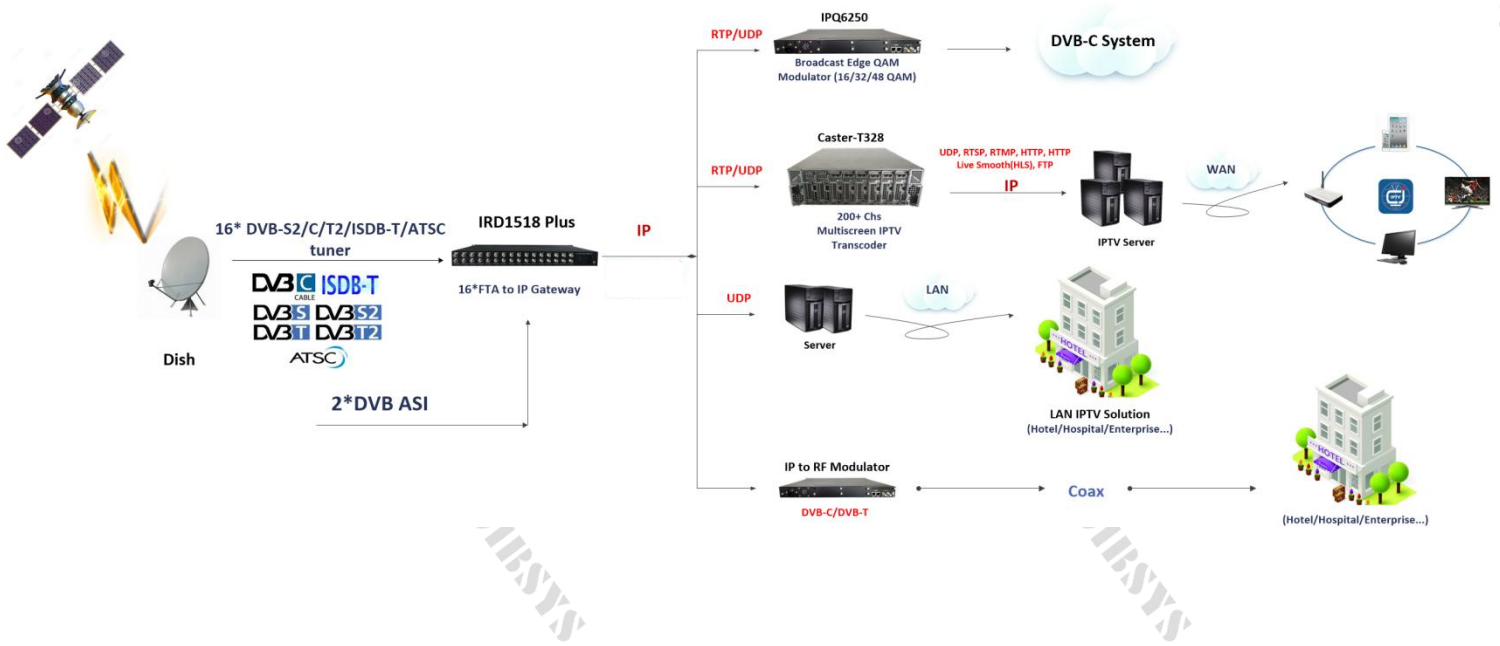
Web Network management
 English language
 Ethernet software upgrade
 Save/Restore/Facture Set/Backup/Load Setting

Environment

Dimensions(HxWxD) 482mm×410mm×44mm
 Weight 3.6Kg
 Temperature 0~45℃(operating); -20~80℃(Storage)
 Power Voltage 100~240VAC, 50/60Hz
 Power Consumption 20W

Ordering Information

Model	Loop out	ASI in	ASI out	MPTS out	SPTS out
IRD1518-8	YES	2	—	8	512
IRD1518Plus-16	YES	2	—	16	



Related Products

Model	Tuner Model				Tuner Number	Tuner LOOP	ASI IN	ASI OUT	USB	LCD
	DVB-S/S2/S2X	DVB-S/S2	DVB-C/T/T2/ISDB-T	ATSC						
IRD1518Plus	√	√	√	√	16	√	2	×	×	×
IRD1518S	√	×	×	×	16/24	×	1	2	1	×
IRD1518Pro	√	×	√	×	16/24	√	2	2	1	√