

# INGRON1308IH Eight-Channel HD Professional IRD



## Features

- Tuner input mode available for DVB-T/T2, DVB-S/S2, DVB-C, DTMB, ATSC-T or ISDB-T
- Input available with Tuner, CI, ASI, IP(UDP/RTP)
- Output with 8\*ASI (in mirror of 8\*CI in)+1\*ASI (TS multiplexed with external TS input)
- Output with TSolP(UDP/RTP, 1000M)
- 8\*DVB-CI slots for multi-program decryption
- BISS-1 and BISS-E decryption modes supported
- Built-in de-multiplexer
- Unicast and multicast modes supported for IP out
- PSI/SI table regeneration, NIT and SDT edition, LCN Edition and Re-generation
- PID Management
- Monitoring working state by network system
- Software upgrading via FTP remote or local USB
- Easy-operation by LCD and keyboard on front panel

## Specifications

### Tuner Input

|               |                     |  |
|---------------|---------------------|--|
| DVB-C Mode    | Input Frequency     | 48 ~ 860 MHz   |
|               | Input Level         | 51 ~ 75 dBuV   |
|               | Symbol Rate         | 1~7 Mbaud (ITU J.83 Annex A)   |
|               | Constellation       | 16/32/64/128/256 QAM   |
|               | Bandwidth           | 6 MHz / 7 MHz / 8 MHz  |
|               | Connector Type      | 8*F type female, 75Ω for input   |
| DVB-S/S2 Mode | Input frequency     | 950 ~ 2150 MHz   |
|               | Symbol Rate         | 2 ~ 45 MBaud   |
|               | Input Level         | -25 ~ 65 dBm   |
|               | Roll-off Factor     | (DVB-S) 0.35;<br>(DVB-S2) 0.35, 0.25, 0.2  |
|               | Convolutional Rate  | (DVB-S) 1/2, 2/3, 3/4, 5/6, 7/8;<br>(DVB-S2 QPSK) 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10;<br>(DVB-S2 8PSK) 3/5, 2/3, 3/4, 5/6, 8/9, /9/10 |
|               | LNB Power           | 0, 13V, 18V  |
|               | DiSEqC              | DiSEqC 1.0   |
|               | Connector Type      | 8*F type female, 75Ω for input   |
| DTV-T/T2 Mode | Input Frequency     | 104~862MHz   |
|               | Input Level         | -70~-20dBm   |
|               | Bandwidth           | 6MHz, 7MHz, 8MHz   |
|               | Carrier Mode        | (DVB-T) 2k, 8k;<br>(DVB-T2) 1k, 2k, 4k, 8k, 16k, 32k   |
|               | Protection Interval | (DVB-T) 1/4, 1/8, 1/16, 1/32;<br>(DVB-T2) 1/4, 5/32, 1/8, 5/64, 1/16, 1/32, 1/64, 1/128  |
|               | Constellation       | (DVB-T) QPSK, 16QAM, 64QAM;<br>(DVB-T2) QPSK, 16QAM, 64QAM, 256QAM   |
|               | Convolutional Rate  | (DVB-T) 1/2, 2/3, 3/4, 5/6, 7/8;<br>(DVB-T2) 1/2, 3/5, 2/3, 3/4, 4/5, 5/6  |

|  |                                |                                    |
|--|--------------------------------|------------------------------------|
| ATSC-T Mode<br><i>(to be released)</i> | Input Frequency                | 54 ~ 864 MHz                       |
|  | Input Level                    | -75 ~ -7 dBm (ATSC 8VSB)           |
|  | Constellation                  | 8VSB                               |
|  | Connector Type                 | 8*F type female, 75Ω for input     |
| DTMB Mode<br><i>(to be released)</i>   | Input Frequency                | 46.5~866 MHz                       |
|  | Input Level                    | -87~-29 dBm                        |
|  | Constellation                  | 4QAM-NR, 4QAM, 16QAM, 32QAM, 64QAM |
|  | Protection Interval            | PN420, PN595, PN945                |
|  | Roll-off Factor                | 0.05                               |
|  | Convolutional Depth            | 240, 720                           |
|  | Convolutional Rate             | 0.4,0.6, 0.8                       |
|  | Symbol Rate                    | 7.56 MBaud                         |
|  | Bandwidth                      | 6MHz, 7MHz, 8MHz                   |
| Connector                              | 8*F type female, 75Ω for input |                                    |

ASI Input

|                |                    |
|----------------|--------------------|
| Standard       | DVB-ASI, EN50083-9 |
| Bit-Rate       | ≤100 Mbps          |
| Connector Type | 1*BNC female, 75Ω  |

IP Input

|                |                                  |
|----------------|----------------------------------|
| Protocols      | TS over IP, UDP/RTP, IGMPv3, ARP |
| Bit-Rate       | 80 Mbps                          |
| Connector Type | RJ45, 10/100M Base-T             |

DVB-CI Module

|                           |                      |
|---------------------------|----------------------|
| Descrambling Processing   | DVB-CAS              |
| Smart Card Interface      | ISO7816              |
| Interface Card Separation | 8*PCMCIA             |
| BISS Mode                 | BISS-1, BISS-E       |
| Descrambling Process      | DVB common algorithm |

TS Processing

|   |
|---|
| TS Input Management Remux and demux among Tuner, ASI and TS/IP Inputs         |
| Service and PID management Remux, filtering and remapping                     |
| PSI/SI table regeneration, NIT and SDT edition, LCN Edition and Re-generation |

Output

|                |                     |   |
|----------------|---------------------|---|
| ASI Output     | Number              | 9*ASI (8*ASI from CI 1~8 + 1*ASI from external TS after Mux.) |
|                | Standard            | EN 50083-9 ASI  |
|                | Output Bit Rate     | Max. 200 Mbps   |
|                | MPEG Frame          | 188/204 byte  |
|                | Reflection Loss     | >10 dB  |
| Connector Type | 75 Ω, BNC interface |   |
| IP Output      | Transport Protocol  | TS over IP output, UDP/RTP protocol, IGMPv3, ARP              |
|                | Efficient Rate      | (Simplex) 200Mbps;<br>(Duplex) 80Mbps(for in or out each)     |
|                | Mode                | Unicast/Multicast   |
|                | Connector Type      | RJ45, 100/1000M Base-T  |

Management

|                |  |
|----------------|--|
| Local Control  | by keyboard or LCD on front panel      |
| Upgrading      | by FTP remote or local USB             |
| Remote Control | by web management, SNMP, HDMS software |
| Language       | English                                |
| Alarm          | 1*D-SUB 9, male                        |

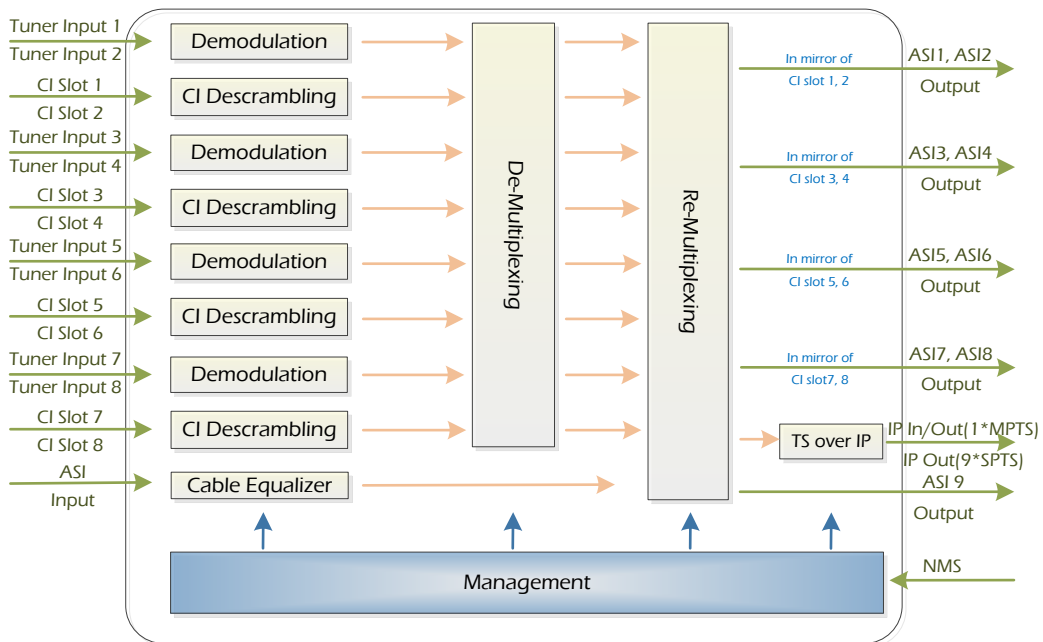
General

|                   |  |
|-------------------|--|
| Voltage           | 90~250V AC, 50/60Hz                    |
| Power Consumption | 28.0 W                                 |
| Environment       | 0~45°C (Operation), -20~80°C (Storage) |
| Dimension (W*D*H) | 430*255*44 mm                          |
| Gross Weight      | 3.5 KGS                                |

Introductions

INGRON1308IH is a high-integrated receiver decoder with a built-in transport stream processor. Equipped with a wide range of inputs of DVB-T/T2, DVB-S/S2, DVB-C, ISDB-T, ATSC-T, or DTMB tuner, ASI and TS/IP, it can be used in the satellite, cable, terrestrial and IP networks. It is able to receive up to 8-channel of tuner inputs, and provides a powerful transport stream processing engine for re-multiplexing, descrambling, TS over IP encapsulation. INGRON1308IH has 8 DVB common interface slots capable of working with most of well-known CAS in the market to de-encrypt multiple pay TV services. Its re-multiplexing capability enables creation of customized SPTS and MPTS output to IP and ASI ports. After CI descrambling, de-multiplexing and re-multiplexing, the device outputs transport streams via ASI and IP(UDP/RTP,1000M). INGRON1308IH is an ideal product for digital TV broadcast network.

Diagram



Rear Panel



INGRON Industrial Co., Ltd.

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