

## Outline

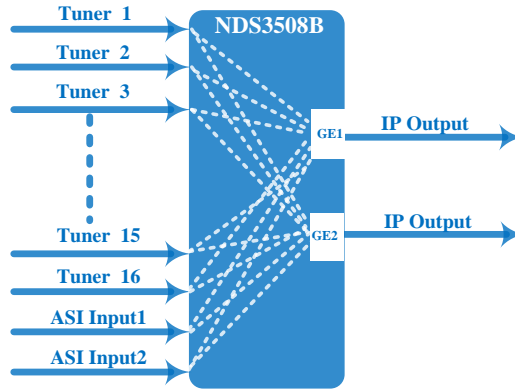
NDS3508B Tuner to IP Gateway is a head-end interface conversion device which supports MPTS and SPTS output switchable. It supports 16 MPTS or 512 SPTS output over UDP and RTP/RTSP protocol. It is integrated with tuner demodulation (or ASI input) and gateway function, which can demodulate the signal from 16 tuners into IP package, or directly convert the TS from ASI input and tuner into IP package, 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.

## Key Features

- Support 16 FTA DVB- S/S2/S2X (DVB-C/T/(T)/ISDB-T/ATSC optional )input, 2 ASI input
- Support BISS descrambling
- Support DisEqc function
- 16 MPTS or 512 SPTS output (MPTS and SPTS output switchable)
- 2 GE mirrored output (IP address and port number of GE1 and GE2 are different), up to 850Mbps---SPTS

- 2 independent GE output port, GE1 + GE2---MPTS
- Support PID filtering, re-mapping (Only for SPTS output)
- Support “Null PKT Filter” function (Only for MPTS output)
- Support Web operation

### Working Principle



### Specifications

|                      |   |  |                                |   |           |
|----------------------|---|--|--------------------------------|---|-----------|
| <b>Input</b>         |   | Optional 1:16 tuners input +2 ASI input---SPTS output<br>Optional 2:14 tuners input +2 ASI input --- MPTS output<br>Optional 3:16 tuners input --- MPTS output |                                |   |           |
| <b>Tuner Section</b> | Multi-mode tuners switchable (New Type) | DVB-C  | Frequency In                   | 60~890MHz                               |           |
|                      |   |  | Standard                       | J.83A(DVB-C), J.83B, J.83C              |           |
|                      |   |  | Constellation                  | 16/32/64/128/256 QAM                    |           |
|                      |   | DVB-T/(T)  | Frequency In                   | 60~890MHz                               |           |
|                      |   |  | Bandwidth                      | 6/7/8 M bandwidth                       |           |
|                      |   |  | ISDB-T                         | Frequency In                            | 60~890MHz |
|                      | Version 1                               | DVB-S  | Frequency In                   | 950-2150MHz                             |           |
|                      |   |  | Symbol rate                    | 1~45 Msps                               |           |
|                      |   |  | FEC                            | 1/2, 2/3, 3/4, 5/6, 7/8                 |           |
|                      |   | DVB-S2   | Frequency In                   | 950-2150MHz                             |           |
|                      |   |  | Symbol rate                    | 1~45 Msps                               |           |
|                      |   |  | FEC                            | 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 |           |
|                      | Version 2 (New Type)                    | DVB-S  | Frequency In                   | 950~2150MHz                             |           |
|                      |   |  | Symbol rate                    | 0.5~45Msps                              |           |
| Signal Strength      |   |  | - 65- -25dBm                   |   |           |
| FEC                  |   |  | 1/2, 2/3, 3/4, 5/6, 7/8        |   |           |
| Constellation        |   |  | QPSK                           |   |           |
| DVB-S2               |   | Max input bitrate  | ≤125 Mbps                      |   |           |
|                      |   | Frequency In   | 950~2150MHz                    |   |           |
|                      |   | Symbol rate  | QPSK/8PSK /16APSK :0.5~45 Msps |   |           |
|                      |   |  |                                |   |           |

|                          |              |  |  |   |   |
|--------------------------|--------------|--|--|---|---|
|                          |              |  |  | 32APSK: 0.5~34Msps;   |   |
|                          |              |  | FEC  | QPSK: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10<br>8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10<br>16APSK: 2/3, 3/4, 4/5, 5/6, 8/9, 9/10<br>32APSK: 3/4, 4/5, 5/6, 8/9, 9/10 |   |
|                          |              |  | Constellation  | QPSK, 8PSK, 16APSK, 32APSK  |   |
|                          |              |  | Max input bitrate  | ≤125 Mbps   |   |
|                          | DVB-S2X      |  |  | Frequency In  | 950~2150MHz   |
|                          |              |  |  | Symbol rate   | QPSK/8PSK /16APSK :0.5~45 Msps<br>8APSK: 0.5~40Msps<br>32APSK: 0.5~34Msps |
|                          |              | FEC  | QPSK: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10, 13/45, 9/20, 11/20<br>8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10<br>8APSK: 5/9-L, 26/45-L<br>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<br>32APSK: 3/4, 4/5, 5/6, 8/9, 9/10, 2/3-L, 32/45, 11/15, 7/9 |   |   |
|                          |              |  | Constellation  | QPSK, 8PSK, 8APSK, 16APSK, 32APSK   |   |
|                          |              |  | Max input bitrate  | ≤125 Mbps   |   |
|                          |              |  | ATSC   | Frequency In  | 54~858MHz   |
| Bandwidth                | 6M bandwidth |  |  |   |   |
| Constellation            | 8VSB         |  |  |   |   |
| <b>BISS Descrambling</b> |              | Mode 1, Mode E (Up to 850Mbps) (descramble individual program)   |  |   |   |
| <b>Output</b>            |              | 512 SPTS IP mirrored output over UDP and RTP/RTSP protocol through GE1 and GE2 port (IP address and port number of GE1 and GE2 are different), Unicast and Multicast |  |   |   |
|                          |              | 16 MPTS IP output (for Tuner/ASI passthrough) over UDP and RTP/RTSP protocol through GE1 and GE2 port, Unicast and Multicast   |  |   |   |
| <b>System</b>            |              | Web based management   |  |   |   |
|                          |              | Ethernet software upgrade  |  |   |   |
| <b>Miscellaneous</b>     |              | Dimension  | 482mm×410mm×44mm (W×L×H)   |   |   |
|                          |              | Approx weight  | 3.6kg  |   |   |
|                          |              | Environment  | 0~45℃(work); -20~80℃ (Storage)   |   |   |
|                          |              | Power requirements   | 100~240VAC, 50/60Hz  |   |   |
|                          |              | Power consumption  | 20W  |   |   |

## Tuner Input Options:

|   |
|---|
| ● 8 DVB-C Tuners + 8 ATSC Tuners                  |
| ● 8 DVB-C Tuners + 8 DVB-T/(T) Tuners             |
| ● 8 DVB-S2/S2X Tuners + 8 DVB-T/(T) Tuners        |
| ● 8 DVB-S2/S2X Tuners + 8 ISDB-T Tuners           |
| ● 16 DVB-S/S2/S2X/DVB-C/T/(T) /ISDB-T/ATSC Tuners |

*Updated date: 21 Feb, 2019*