



## Outline

GOS3343D is a high performance and cost-effective mux-scrambling QAM modulator. It has multiple input ports optional. After multiplexing, scrambling and QAM modulating process, then it gives 4 RF output. To meet customers' various requirements, this device is also equipped with IP port to output 4 MPTS over UDP. Its pluggable structure design greatly facilitates the change of modules (demodulator) as needed. The four CAMs/CIs (Optional) accompanied and BISS modules can descramble the programs input from 4 Tuner inputs. Its pluggable structure design greatly facilitates the change of modules (demodulator) as needed. GOS3343D is also characterized with high integrated level, high performance and low cost. This is very adaptable to newly generation CATV broadcasting system.

## Ordering Configuration



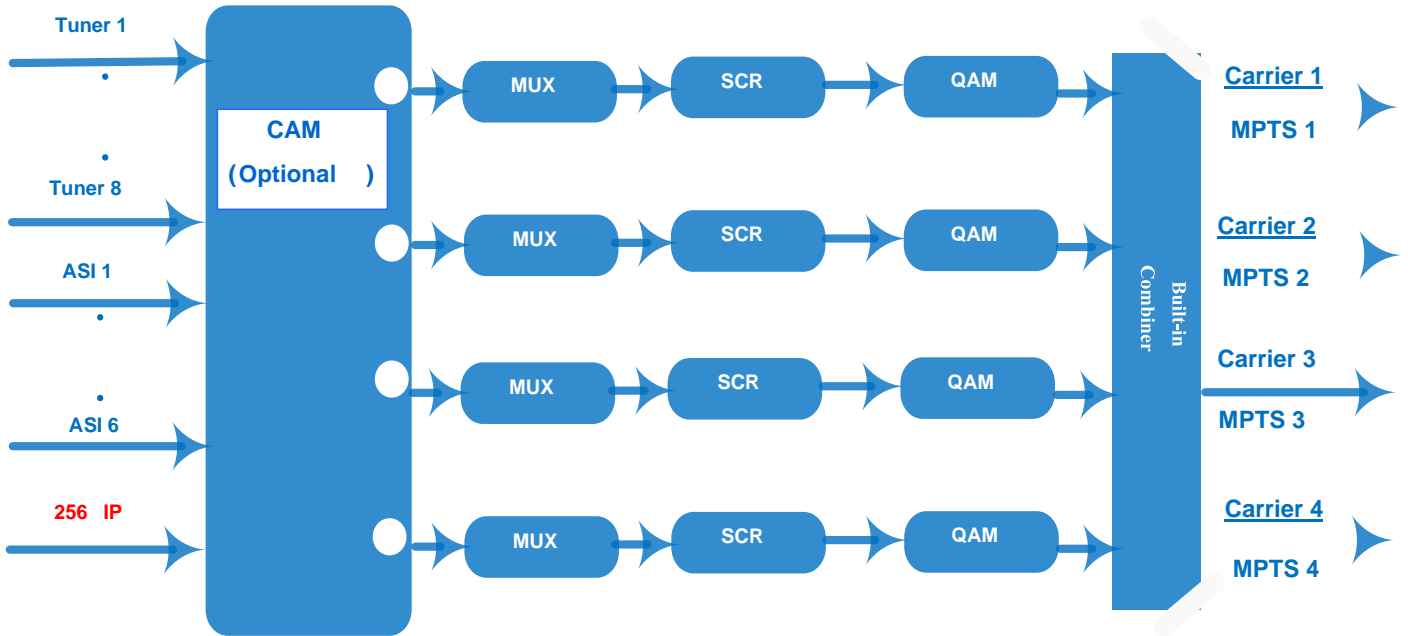
Version 1

Version 2

## Key Features

- **Multiple Input ports optional:**
  - 8 DVB-C/T/(T)/ISDBT/S/S2/S2X/ATSC FTA Tuner + 6 ASI input ports+256 IP input (Version 1)**
  - 4 DVB-C/S/S2/ATSC Tuner with CAM+6 ASI input ports (Version 2)**
- **Support 4 channels multiplexing+4 channels scrambling+4 channels QAM modulating**
- **Fully support DVB-C (EN300 429) and ITU-T J.83A/B/C**
- **Fully support DVB general scrambling system description ETR289, simulcrypt standard**
  - ETSI 101 197 and ETSI 103 197**
- **Support accurate PCR adjusting**
- **Support PSI/SI editing and inserting**
- **Excellent RF output performance index, MER≥40db**
- **Support 4\*MPTS output over UDP**
- **4 CAM decrypt multiple programs from 4 Tuner input (Optional)**
- **Support BISS descrambling(only for Version 2)**
- **Support LCD display and keyboard**
- **Support Web management, Updates via web and USB**

# Working Principle



## Specifications

|                      |   |                                    |   |   |             |  |
|----------------------|---|------------------------------------|---|---|-------------|--|
| <b>Input</b>         | 8 DVB-C/T/(T)/ISDBT/S/S2/S2X/ATSC FTA Tuner + 6 ASI input+256 IP input -----<br>Version 1 |                                    |   |   |             |  |
|                      | 4 DVB-C/S/S2/ATSC Tuner with CAM + 6 ASI -----Version 2                                   |                                    |   |   |             |  |
| <b>Tuner Section</b> | For Version 1<br>:<br>Multi-mode<br>tuners<br>switchable<br><b>(New Type)</b>             | DVB-C                              | Input Frequency   | 60 ~890 MHz   |             |  |
|                      |   |                                    | Standard  | J.83A, J.83C  | J.83B       |  |
|                      |   |                                    | Constellation   | 16/32/64/128/256 QAM  | 64/256 QAM  |  |
|                      |   | DVB-T/(T)                          | Input Frequency   | 60 ~890 MHz   |             |  |
|                      |   |                                    | Bandwidth   | 5/6/7/8 M   |             |  |
|                      |   | ISDB-T                             | Input Frequency   | 60 ~890 MHz   |             |  |
|                      |   |                                    |   |   |             |  |
|                      |   | For Version 1<br><b>(New Type)</b> | DVB-S   | Input Frequency   | 950~2150MHz |  |
|                      |   |                                    |   | Symbol rate   | 0.5~45Msps  |  |
|                      | Signal Strength   |                                    |   | - 65- -25dBm  |             |  |
|                      | FEC   |                                    |   | 1/2, 2/3, 3/4, 5/6, 7/8   |             |  |
|                      | Constellation   |                                    |   | QPSK  |             |  |
|                      | Max input bitrate   |                                    |   | ≤120 Mbps   |             |  |
|                      | DVB-S2X   |                                    | Input Frequency   | 950~2150MHz   |             |  |
|                      |   |                                    | Symbol rate   | QPSK/8PSK /16APSK :0.5~45 Msps<br>32APSK: 0.5~40Msps;   |             |  |
|                      |   |                                    | 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   | ≤120 Mbps   |             |  |
|                      |   |                                    |   |   |             |  |
| DVB-S2X              | Input Frequency   |                                    | 950~2150MHz   |   |             |  |
|                      | Symbol rate   |                                    | QPSK/8PSK /16APSK :0.5~45 Msps<br>8APSK: 0.5~40Msps<br>32APSK: 0.5~40Msps |   |             |  |

|  |               |       |                   |  |
|--|---------------|-------|-------------------|--|
|  |               |       | 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, 2/3-L, 32/45, 11/15, 7/9 |
|  |               |       | Constellation     | QPSK, 8PSK, 8APSK, 16APSK, 32APSK  |
|  |               |       | Max input bitrate | ≤120 Mbps  |
|  | For Version 2 | DVB-C | Standard          | J.83A(DVB-C), J.83B, J.83C   |
|  |               |       | Input Frequency   | 30~1000Mhz   |
|  |               |       | Constellation     | 16/32/64/128/256 QAM   |
|  |               | DVB-S | Input Frequency   | 950~2150MHz  |
|  |               |       | Symbol rate       | 2-45Msps   |

|                     |                       |  |                       |   |  |
|---------------------|-----------------------|--|-----------------------|---|--|
|                     |                       |  | FEC                   | 1/2, 2/3, 3/4, 5/6, 7/8                 |  |
|                     |                       |  | Signal Strength       | -65~-25dBm                              |  |
|                     |                       |  | Constellation         | QPSK                                    |  |
|                     |                       | DVB-S2   | Input Frequency       | 950~2150MHz                             |  |
|                     |                       |  | Symbol rate           | QPSK/8PSK 1~45 Msps                     |  |
|                     |                       |  | FEC                   | 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 |  |
|                     |                       |  | Constellation         | QPSK, 8PSK                              |  |
|                     |                       | ATSC   | Input Frequency       | 54~858MHz                               |  |
|                     |                       |  | Bandwidth             | 6M                                      |  |
|                     |                       |  | Constellation         | 8VSB                                    |  |
| <b>Multiplexing</b> | Maximum PID Remapping | 128per input channel   |                       |   |  |
|                     | Function              | PID remapping (automatically or manually)                                |                       |   |  |
|                     |                       | Accurate PCR adjusting   |                       |   |  |
|                     |                       | Generate PSI/SI table automatically                                      |                       |   |  |
| <b>Scrambling</b>   | Maximum simulcrypt CA | 4  |                       |   |  |
|                     | Standard              | ETSI 101 197, ETSI 103 197   |                       |   |  |
|                     | Connection            | Local/remote connection  |                       |   |  |
| <b>Modulation</b>   | QAM Channel           | 4  |                       |   |  |
|                     | Standard              | EN300 429/ITU-T J.83A/B/C  |                       |   |  |
|                     | MER                   | ≥40db  |                       |   |  |
|                     | RF frequency          | 30~999MHz, 1KHz step   |                       |   |  |
|                     | RF output level       | -10~0dbm,0.1db step -----Version 1<br>-20~0dbm,0.1db step -----Version 2 |                       |   |  |
|                     | Symbol Rate           | 5.0Msps~9.0Msps, 1ksps stepping  |                       |   |  |
|                     |                       | J.83A  | J.83B                 | J.83C                                   |  |
|                     | Constellation         | 16/32/64/128/256QAM  | 64/256 QAM            | 64/256 QAM                              |  |
|                     | Bandwidth             | 8M   | 6M                    | 6M                                      |  |
|                     | <b>System</b>         | Local interface  | LCD + control buttons |   |  |
| Remote management   |                       | Web NMS  |                       |   |  |
| Stream Out          |                       | 4*MPTS over UDP out (RJ45, 1000M, Unicast/Multicast)                     |                       |   |  |
| Language            |                       | English and Chinese  |                       |   |  |
| Software Upgrading  |                       | Web and USB  |                       |   |  |
| <b>General</b>      | Dimension (W*D*H)     | 482mm×300mm×44.5mm   |                       |   |  |
|                     | Temperature           | 0~45°C(Operation) ; -20~80°C(Storage)                                    |                       |   |  |
|                     | Power                 | AC 100V±1050/60Hz;<br>AC 220V±10%, 50/60HZ                               |                       |   |  |

### For More Information

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#### Comcast México

Overseas Sales Subsidiary  
Cal. Lázaro Cárdenas #1309  
Col. Colón industrial CP.44940  
Guadalajara, Jalisco  
Tel. +52 33 38607059  
Info.mx@comcast-sa.com

#### Comcast Guatemala

Overseas Sales Subsidiary  
Av. Hincapié 28-45 zona 13  
Guatemala city 01013  
Tel. +506 4004 1400  
Gerente.gua@comcast-sa.com

#### Comcast Nicaragua

Overseas Sales Subsidiary  
3ra. Entrada las Colinas, Embajada  
De cuba 1C, Este, Casa #34  
Mangua, Nicaragua  
Te, +1809 5711033  
Admin.nic@comcast-sa.com

#### Comcast El Salvador

Overseas Sales Subsidiary  
51 Av. Norte # 159 entre calle  
poniente y Av. Roosevelt  
San Salvador, El Salvador  
Tel. +503 7950 4882  
Info.sc@comcast-sa.com

#### Comcast Republican Dominican

Overseas Sales Subsidiary  
Av. Nuñez de Cáceres #2 Plaza  
Comercial Pradosur, Local 102  
Santo Domingo, Dominican Republic  
Te.+ 1 809 571 1033