

**QAM Modulator  
WDQ-3200**

**Features**

- ◇ One ASI input, up to 108Mbps bit rate for DVB-ASI input (cover both data packets and data burst)
- ◇ Support TS (SPTS or MPTS) re-multiplexing function, 2 ASI outputs
- ◇ Support 1.15MHz~8.05MHz bandwidth
- ◇ Provide RF output monitoring port (-20dB)
- ◇ Adjustable Symbol Rate up to 7Mbaud
- ◇ Nominal RF Output power  $\geq 100\text{dBuV}$  ( with 0~25dB adjustable attenuation range) and 48~863MHz frequency range
- ◇ PSI/SI tables regeneration
- ◇ PID filtering and re-mapping
- ◇ Local keyboard control and LCD display, or access via Ethernet link



**Description**

WDQ-3200 is a new compact (1RU only) chassis and cost-effective QAM modulator, which is designed by Ningbo Youxin according to the DVB related standards. WDQ-3200 has one ASI input and output, one IF input and output, the RF output supports QPSK, 16QAM~256QAM modes. The WDQ-3200 has very convenient management interface, the user can complete all operation via local keyboard and LCD display on device, or access through the Ethernet port on device

***Recommended Operating Conditions***

Stress in excess of the maximum absolute ratings can cause permanent damage to the device (See Table 1)

Table 1 – Recommended Operating Conditions

| Parameter                          | Symbol | Min. | Max. | Unit |
|------------------------------------|--------|------|------|------|
| Supply Voltage <small>Note</small> | V      | 90   | 250  | V    |
| Supply Frequency                   | F      | 49   | 51   | Hz   |
| power consumption                  | C      |      | 25   | W    |
| Ambient Operating Temperature      | Tw     | 0    | +50  | ° C  |
| Storage Temperature                | Ts     | -25  | +55  | ° C  |
| Operating Humidity                 | H      | 10   | 75   | %    |

Note: Support both 110V and 220V supply voltage standards, but please let us know which one do you need when you release order

**Specifications**

Table 2 – Technical Specifications

| Parameter                       | Symbol | Description               | Unit  | Remark                 |
|---------------------------------|--------|---------------------------|-------|------------------------|
| <b>Mechanical dimension</b>     |        |                           |       |                        |
| Height                          | H      | 42                        | mm    | About 1U               |
| Width                           | W      | 434                       | mm    | About 17"              |
| Depth                           | D      | 340                       | mm    |                        |
| <b>ASI Input</b>                |        |                           |       |                        |
| Number of ASI input             | -      | 1                         |       |                        |
| Impedance                       | -      | 75                        | W     |                        |
| Connector                       | -      | BNC                       | NA    |                        |
| Maximum bit rate                | -      | 108                       | Mbps  |                        |
| TS packet format                | -      | 188 or 204                | Byte  | Automatic detection    |
| Transmission format             | -      | Data packet or data burst | NA    |                        |
| <b>ASI Output</b>               |        |                           |       |                        |
| Number of ASI output            | -      | 2                         |       |                        |
| Impedance                       | -      | 75                        | W     |                        |
| Connector                       | -      | BNC                       | NA    |                        |
| Effective bit rate              | -      | ≤51.6                     | Mbps  |                        |
| <b>IF Output</b>                |        |                           |       |                        |
| Impedance                       | -      | 75                        | W     |                        |
| Connector                       | -      | BNC                       | NA    |                        |
| Frequency                       | -      | 35~45                     | MHz   | Adjustable             |
| Output level                    | -      | >80                       | dBuV  |                        |
| <b>RF Output</b>                |        |                           |       |                        |
| Impedance                       | -      | 75                        | W     |                        |
| Connector                       | -      | BNC                       | NA    |                        |
| Frequency                       | -      | 48~863                    | MHz   |                        |
| Output level                    | -      | >110                      | dBuV  | Adjustable             |
| <b>Modulation Specification</b> |        |                           |       |                        |
| Modulation scheme               |        | QPSK, 16~256QAM           |       | Support Annex A/B/C    |
| Symbol Rate                     | SR     | 1~7                       | Mbaud |                        |
| Bandwidth                       | BW     | 1.15~8.05                 | MHz   |                        |
| Effective output bit rate       |        | ≤51.6                     | Mbps  | SR=7Mbaud, 256QAM      |
| Modulation Error Rate           | MER    | ≥40                       | dB    | After equalizer, 64QAM |
| Bit Error Rate                  | BER    | ≥9x10E-9                  |       | After FEC, 64QAM       |
| Carrier to Noise                | C/N    | ≥45                       | dB    |                        |

### Applications

- ◇ Re-multiplex for all DVB program Transport Stream related application



**QAM Modulator  
WDQ-3200**

[www.youfibercable.com](http://www.youfibercable.com)

---

◇ DVB-C QAM modulation