

Technical specifications DV400 IP to ATSC 8-VSB modulator

19" 1 RU Rack version

| General | | | |
|--|---------------------|--|-----------|
| Power supply | | 110... 230 | VAC |
| Power consumption | | 42 ¹⁾ | W |
| Recommended operating temperature ²⁾ | | 10-45 | °C |
| Maximum allowed operating temperature ^{2) 3)} | | 55 | °C |
| Declaration of conformity | | CE marking | |
| Dimensions | PCB modulator board | WxHxD 160x100x18 | mm |
| | housing | 1RU 19" rackmount | |
| Weight 19" housing incl. power supply | | 3.5 | kg |
| AC Power connector | | Euro | |
| Ethernet | | | |
| Standard | | IEEE 802.3-2002 | |
| Max transfer speed | | 1000 | Mbps |
| Connector type | | RJ-45 | |
| Protocols | | | |
| TS encapsulation | | Pro-MPEG CoP #3 release 2 | |
| Bitrate | | Constant (CBR) (Variable bitrate is not supported) | |
| Modes | | UDP ; no RTP ; no FEC | |
| TS packets per frame | | 1...7 | packet(s) |
| Latency (excluding Jitter tolerance) | | 1 | ms |
| IP jitter buffer size | | Max. 100 | ms |
| Multicast support | | IGMP v2 | |
| Network management | | SNMP v2c | |
| MIB | | MIB II, DVSB MIB | |

1) with 3 modulator boards installed.

2) Temperature measured by the internal sensor of the DQ801.
This value can be obtained through the user interface or through SNMP commands.

3) Operating in this temperature range is not recommended by STN, as it may reduce MTBF.

| Modulation | | |
|---|----------------------------------|--------------------------------------|
| Modulation standard | ATSC A/53 part 2 8-VSB | |
| data rate | 19.39 | Ms/s |
| Channel bandwidth | 6 | MHz |
| RF Output | | |
| Number of RF channels with 3 modulator boards installed | 12 | |
| RF output Impedance | 75 | Ω |
| Return Loss | 15...17 | dB |
| Connector Type | F female | |
| Level range 1 channel on Level range 4 channels on | 35 ... 53 35 ... 47 | dBmV/channel dBmV/channel |
| Level accuracy | ± 1 ⁴⁾ | dB |
| RF-Off Attenuation | ≥ 70 | dB |
| Spectral purity | spur/channel power ⁵⁾ | ≥ -60 dB |
| Phase Noise @ 10 kHz offset | ≤ -98 ⁶⁾ | dBc/HZ |
| Wideband Noise | ≤ -135 | dBm/Hz @3dBm/QAM channel level |
| RF Frequency | | |
| Tuning range (center freq.) | 47...864 | MHz |
| Channel spacing | 6...7 | MHz |
| Tuning step Size | 1 | kHz |
| Accuracy | 5 | ppm |
| Stability | 5 | ppm |
| Logging | | |
| Total memory size | 256 | entries |
| Logging type | First In First Out | |

- 4) The best RF level accuracy is obtained when the higher frequencies are assigned to channel group 1,2 and the lower frequencies to channel group 3,4.
- 5) measured with 4 channels on at 0dBm/channel
- 6) Measured in CW test mode.

These specifications may change without prior notice