# Modular reception system
# Multichannel digital transmodulators

Converting of 8 DVB-S/S2 modulated input signals into 4/8 COFDM/QAM modulated DVB-T/DVB-C RF channels.

- TS processing:
  any service to any output
  PCR restamping
  service filtering
  PSI/SI regeneration
  NIT generation
  PMT version monitoring
- BISS descrambling
- Web control and SNMP monitoring
- loop through RF distributing at input and output
- DIN rail or wall mounting
- robust die-cast housing
- connectors:
  RF input/output - type F
  Ethernet control interface - RJ-45
  screw terminal block for DC entry
  power distribution bus

**tdx481**
8 DVB-S/S2 transmodulator to 8 DVB-T channels
**tdx441**
8 DVB-S/S2 transmodulator to 4 DVB-T channels
**tdq481**
8 DVB-S/S2 transmodulator to 8 DVB-C channels
**tdq441**
8 DVB-S/S2 transmodulator to 4 DVB-C channels

## Technical specifications

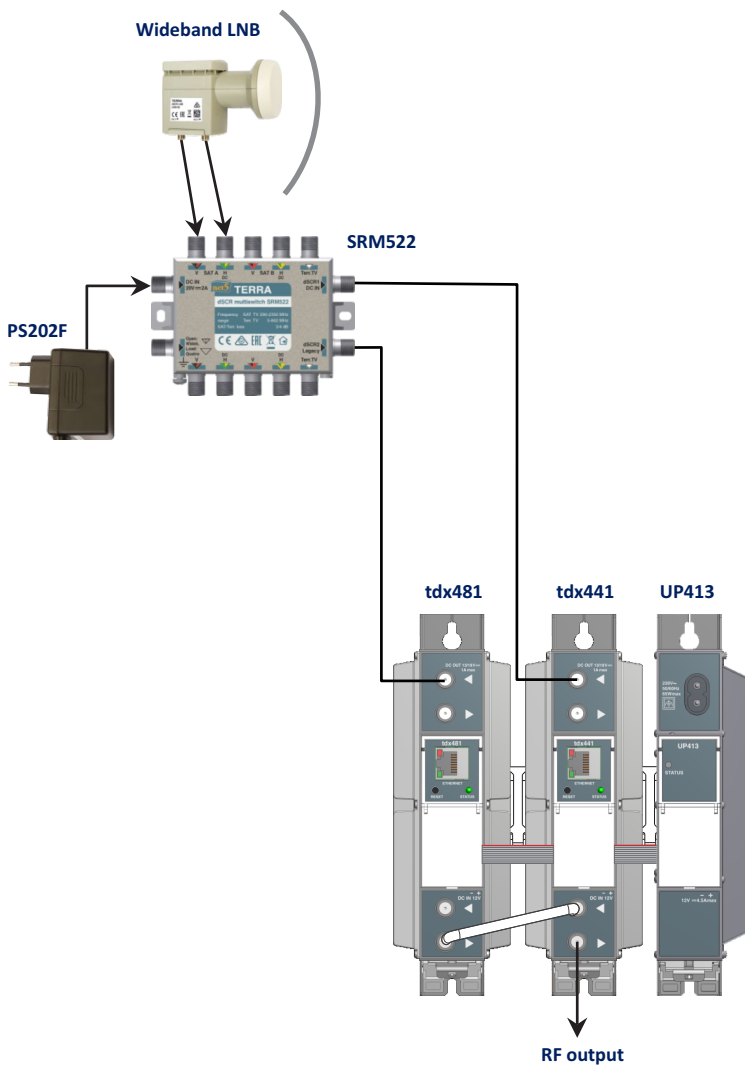| T Y P E | | tdx481 | tdx441 | tdq481 | tdq441 |
|---|---|---|---|---|---|
| Ordering number | | 04806 | 04807 | 04809 | 04808 |
| Sections input/output | | 8/8 | 8/4 | 8/8 | 8/4 |
| **RF input** | RF input count | 1 | | | |
| | frequency range pr. | 950-2150 MHz | | | |
| | level/impedance | 55-95 dB$\mu$V / 75 $\Omega$ | | | |
| | return loss | $\geq$ 10 dB | | | |
| | loop through frequency range/loss | 950-2150 MHz / $\leq$ 1.5 dB | | | |
| | LNB powering/control pr. | 0/13/18 V & 22 kHz, 500 mA total, DiSEqC 1.0, EN50494, EN50607 | | | |
| | standard pr. | DVB-S/S2* | | | |
| | modulation | QPSK, 8PSK, APSK 8/16/32 | | | |
| | symbol rate pr. | 2 $\div$ 45 Ms/s | | | |
| **RF output** | standard pr. | **DVB-T** | | **DVB-C** | |
| | modulation pr. | QPSK, QAM16, QAM64 | | QAM16, QAM32, QAM64, QAM128, QAM256 | |
| | frequency range pr. | 170-230 MHz / 470-862 MHz | | 96-862 MHz | |
| | channel allocation, adjacent | 4 + 4 | 4 | 4 + 4 | 4 |
| | level/impedance | 90 $\pm$ 2 dB$\mu$V/75 $\Omega$ | | | |
| | TS bit rate | < 31 Mbit/s | | < 53 Mbit/s | |
| | MER | $\geq$ 35 dB | | $\geq$ 40 dB | |
| | channel bandwidth pr. | 7 MHz / 8 MHz | | 4...8.3 MHz | |
| | guard interval pr. | 1/4, 1/8, 1/16, 1/32 | | - | |
| | code rate pr. | 1/2, 2/3, 3/4, 5/6, 7/8 | | - | |
| | symbol rate pr. | - | | 3.5 $\div$ 7.2 Ms/s | |
| | return loss | $\geq$ 10 dB | | | |
| | roll off | - | | 15% | |
| | transmission mode | 2K | | - | |
| | total output level adjustment pr. | 0 $\div$ -15.0 dB by 1 dB step | | | |
| | loop through frequency range/loss | 45-862 MHz / $\leq$ 2.5 dB | | | |
| **Management port** | | standard IEE802.3 10/100 Base T | | | |
| **Supply voltage** | | 12 V $\pm$ 1 V | | | |
| **Current consumption, without external load** | | 1.2 A | 1.0 A | 1.2 A | 1.0 A |
| **Current consumption, with maximum external load** | | 2.2 A | 2.0 A | 2.2 A | 2.0 A |
| **Operating temperature range** | | 0º $\div$ +35ºC | | | |
| **Dimensions/Weight (packed)** | | 63x198x112 mm / 1.24 kg | | | |

\*   supports physical layer scrambling (PLS) and multiple input streams (MIS)
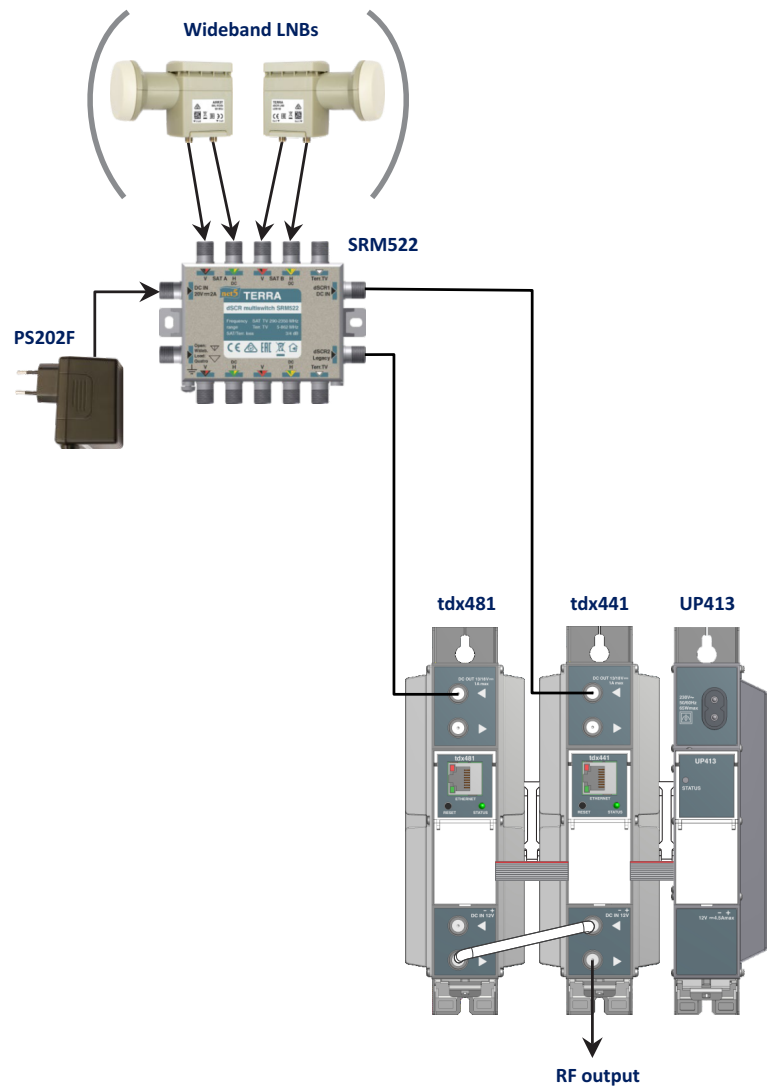
pr.   software control

# Modular reception system
# Application examples

Application example of SAT TV content distribution from 1 satellite orbital position.

Application example of SAT TV content distribution from 2 satellite orbital position.



**SRM522** - wideband compatible dSCR multiswitch
**PS202F** - 20 V power supply
**UP413** - 12 V power supply