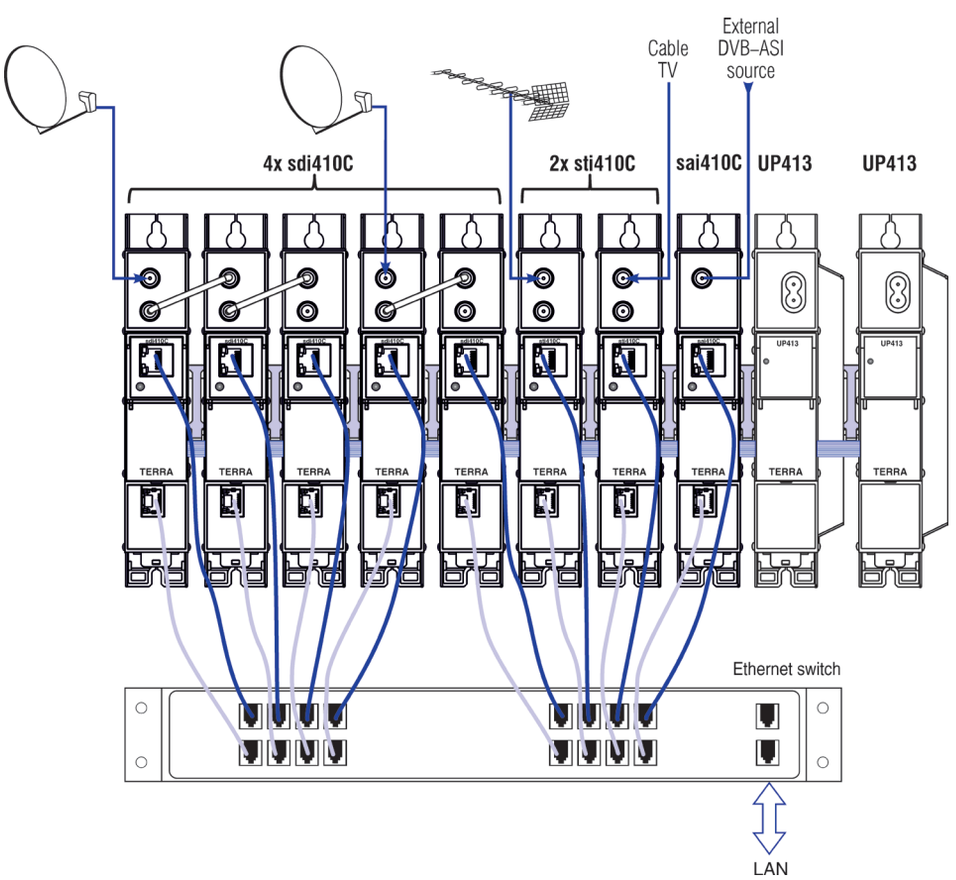
# Modular reception system
# DVB to IP streamers

Dynamic penetration to every day live of tablets, laptops, SMART TVs creates the growing demand for distribution of visual content over in house Local Area Network. Flexibility and interactivity additional positive feature brings Internet protocol based television to TV distribution.
TERRA offers front IPTV streaming solution for various applications like hotels and hospitals, offices and stadiums and etc. The headend enables streaming of broadcasting programs from DBS satellites, terrestrial towers and CATV networks as well content from external DVB source through ASI interface.
Decryption of scrambled services is available through built in Common Interface.The web-based control of the headend makes easy setup and configuration.
The headend is very compact and power saving - high density solution: 2.4wats - 24 services per module.


- DVB-S/S2 streamer module
- DVB-T/T2/C streamer module
- DVB-ASI streamer module
- Power supply module




**Application diagram of IP streaming from:**
**- 6 SAT transponders from 2 satellites**
**- 1 DVB-T channel**
**- 1 cable TV channel**
**- up to 24 services from single DVB-ASI source**
**- powering redundancy**

**UP413** - power supply

TERRA

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# DVB to IP streamers

**IP streaming of free-to-air or descrambled DVB services.**

- one channel IP streamers
- common interface
- BISS descrambling (for sda410C, sta410C, saa410C only)
- SPTS or MPTS IP stream
- regeneration of information contained in the MPEG-2 tables
- UDP and RTP transmission protocols
- Web interface via dedicated Ethernet port
- loop through RF distributing
- SNMP monitoring
- robust die-cast housing
- connectors:
  RF, ASI input/output - type F
  Ethernet control, Ethernet stream output - RJ-45
  CAM - PCMCIA
  screw terminal block for DC entry
  power distribution bus

**sdi410C**
DVB-S/S2 to IP

**sti410C**
DVB-T/T2/C to IP

**sai410C**
ASI to IP

**sda410C***
DVB-S/S2 to IP and ASI

**sta410C***
DVB-T/T2/C to IP and ASI

**saa410C***
ASI to IP and ASI


## Technical specifications

| T Y P E | | sdi410C* | | sti410C* | | | sai410C* |
|---|---|---|---|---|---|---|---|
| **Ordering number** | | 03818 | | 03819 | | | 03820 |
| **RF input** | frequency range | 950-2150 MHz | | 47-862 MHz | | | - |
| | AGC range/impedance | 45-85 dBµV / 75 Ω | | 30-80 dBµV / 75 Ω | | | - |
| | loop through gain | -1 ± 1 dB | | 0 ± 1 dB | | | - |
| | standard | **DVB-S** | **DVB-S2** | **DVB-T** | **DVB-T2** | **DVB-C** | - |
| | modulation | QPSK | QPSK, 8PSK | QPSK, QAM16, QAM64 | QPSK, QAM16, QAM64, QAM256 | QAM16, QAM32, QAM64, QAM128, QAM256 | - |
| | bandwidth | - | - | 7 MHz, 8 MHz | 7 MHz, 8 MHz | - | - |
| | symbol rate | 2 ÷ 45 Ms/s | 2 ÷ 45 Ms/s | - | - | 1 ÷ 7.2 Ms/s | - |
| | code rate | 1/2, 2/3, 3/4, 5/6, 7/8 | 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 | 1/2, 2/3, 3/4, 5/6, 7/8 | 1/2, 3/5, 2/3, 3/4, 4/5, 5/6 | - | - |
| | roll of | 35 % | 20 %, 25 %, 35 % | - | - | 15 % | - |
| | signal processing | ETS 300 421 | ETS 302 307 | ETS 300 744 | ETS 302 755 | ETS 300 429 | - |
| **ASI input** | packet length | - | | - | | | 188 / 204 bytes |
| | bit rate | - | | - | | | up to 72 Mbps |
| | input voltage | - | | - | | | 200...880 mVpp |
| | impedance | - | | - | | | 75 Ω |
| | return loss | - | | - | | | >15 dB |
| **LNB powering/control** | | 0/14/18 V & 300 mA max. DiSEqC 1.0 | | 12 V 100 mA | | | - |
| **IP output** | standard | IEE802.3 10/100 Base T | | | | | |
| | bit rate | up to 80 Mbps | | | | | |
| | number of simultaneous streams | up to 24 | | | | | |
| | transmission protocols | UDP/RTP | | | | | |
| | multicast, MPTS, SPTS | Yes | | | | | |
| **Management port** | | standard IEE802.3 10/100 Base T | | | | | |
| **Current consumption**** | | 12 V 0.2 A | | | | | |
| **Operating temperature range** | | 0° ÷ +50° C | | | | | |
| **Dimensions/Weight (packed)** | | 36x198x107.5 mm/0.84 kg | | | | | |

* option with ASI output:

| Type | Ordering number |
|---|---|
| **sda410C** | 03822 |
| **sta410C** | 03823 |
| **saa410C** | 03824 |

**ASI output parameters**:
bit rate - up to 72 Mbps
impedance - 75 Ω
packet lenght - 188 bytes
MPTS only

** without external DC feeding and CAM; with CAM ≈ 0.3 A