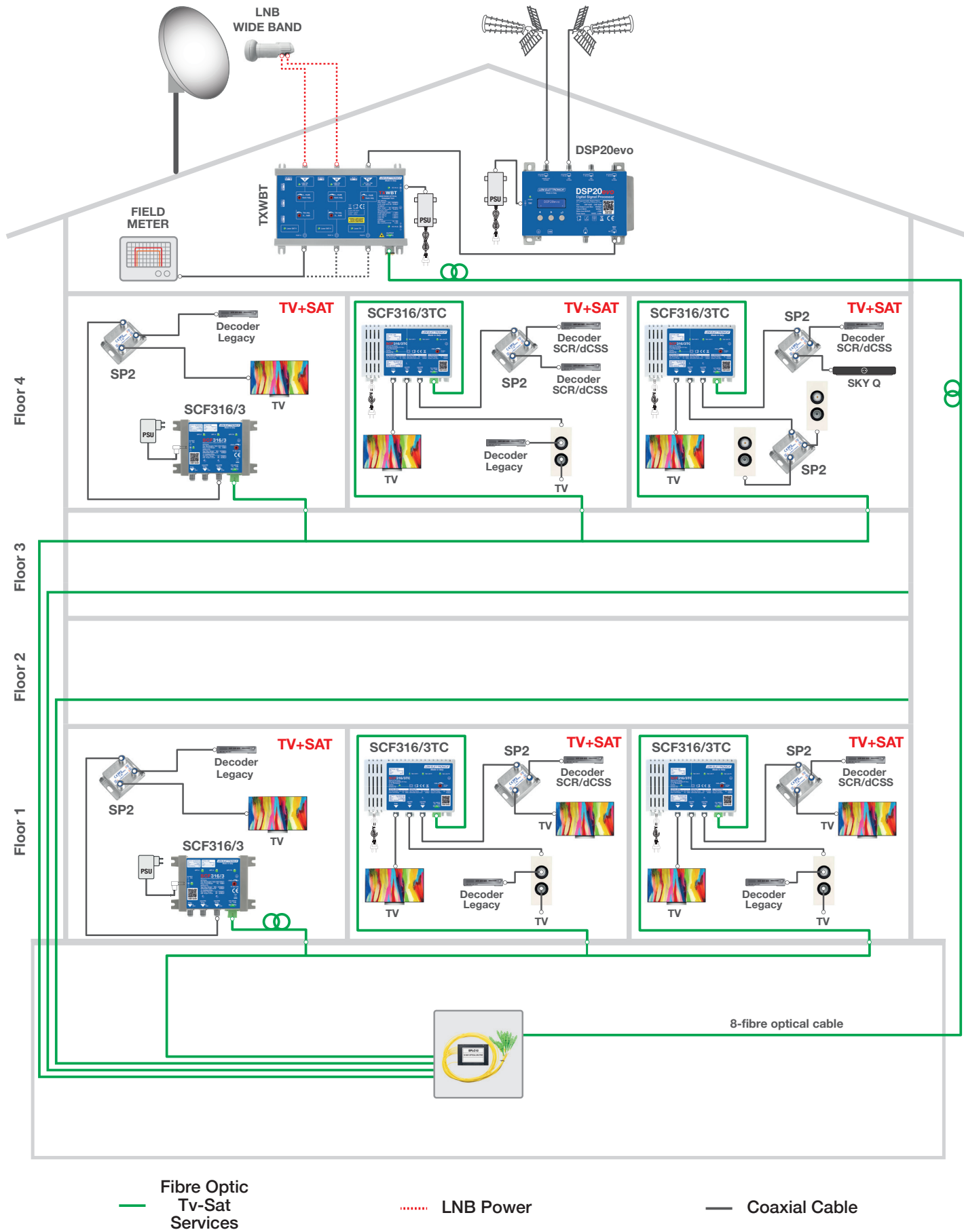


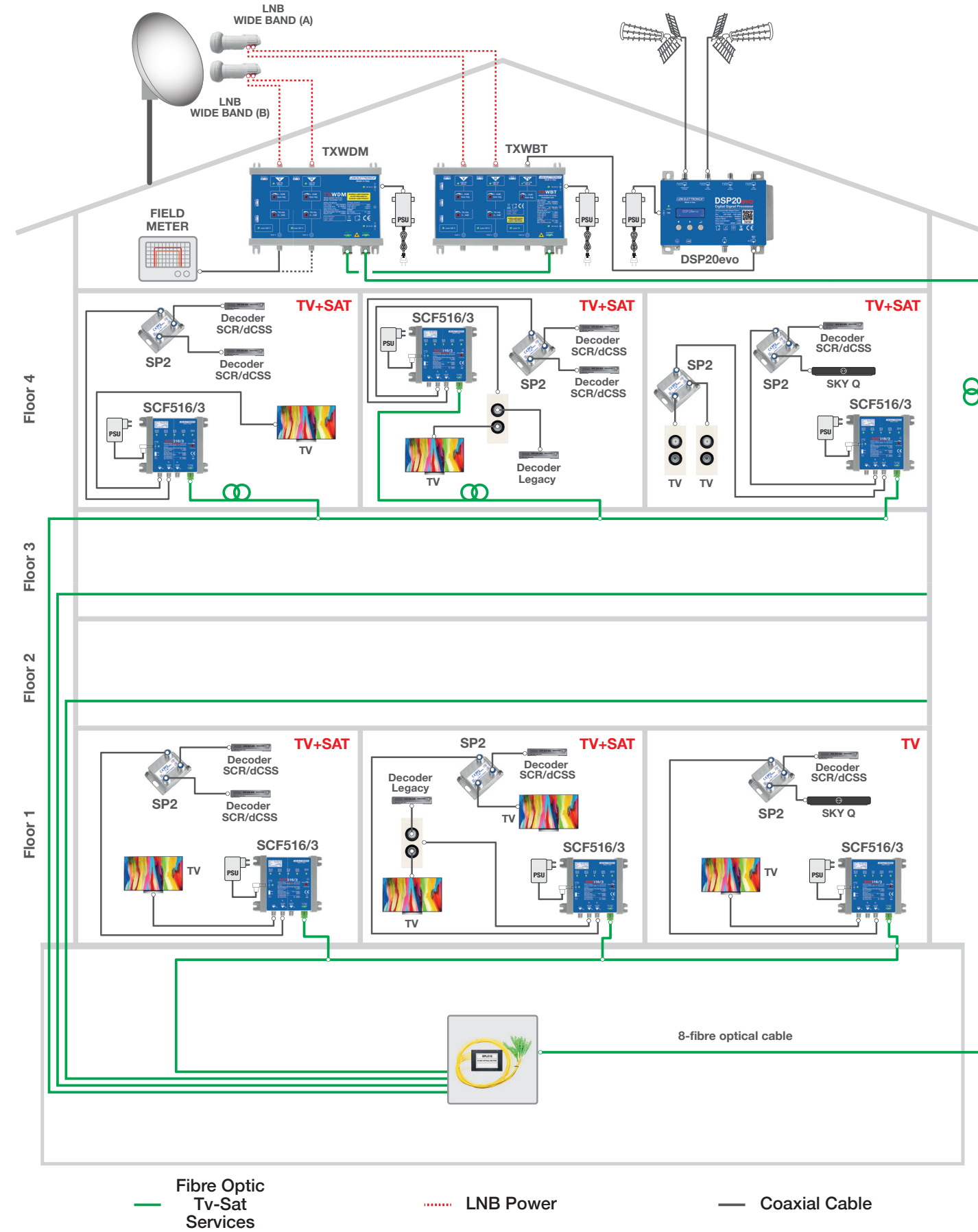
## FTTH for Terrestrial + 1 Satellite



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**LEM ELETRONICA®**  
Satellite and TV reception equipment

## FTTH for Terrestrial + 2 Satellites



## Multi Wavelength optical Transmitters

High-performance **CWDM** optical transmitters equipped with high-quality, low-distortion DFB lasers. Designed to simplify signal distribution, these advanced transmitters receive satellite signals from Wideband RF LNB outputs, along with terrestrial TV signals, and seamlessly transmit them to up to **64 users** via a single SC/APC fiber output—without the need for external amplification. A compact and reliable solution for modern **fiber-to-the-home** (FTTH).

Depending on the chosen configuration, the system can transmit either a single or two full satellite orbital positions over a single optical fiber.

■ Dedicated laser at each band for maximum RF signal quality

■ Status LEDs for each laser for quick diagnostics

■ Automatic Control Gain on Satellite inputs

■ Compact size



### LNB Wide Band

Captures the full frequency spectrum of a satellite and transmits it via two outputs (Vertical and Horizontal polarization) within the 290–2340 MHz range.

|                          | TXWBT                                                                             | TXWBTe                                                                            | TXWB                                                                              | TXWBe                                                                             | TXWDM                                                                             | TXWDMe                                                                            |
|--------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                          |  |  |  |  |  |  |
| RF INPUTS                | 3                                                                                 |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| SAT INPUT RANGE          | 240... 2.400MHz                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| TV INPUT RANGE           | 80... 900MHz                                                                      |                                                                                   | -                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| TEST OUTPUT              | 3                                                                                 | -                                                                                 | 2                                                                                 | -                                                                                 | 2                                                                                 | -                                                                                 |
| OPTICAL OUTPUT           | 1 (SC/APC)                                                                        |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| OPTICAL LOOP THROUGH     | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                 | 1 (SC/APC)                                                                        | 1 (SC/APC)                                                                        |
| OPTICAL CONNECTOR        | SC/APC                                                                            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| OPTICAL POWER            | 8dBm                                                                              | 6dBm                                                                              | 8dBm                                                                              | 6dBm                                                                              | 8dBm                                                                              | 6dBm                                                                              |
| N° OF WAVELENGTHS        | 3                                                                                 |                                                                                   | 2                                                                                 |                                                                                   | 2                                                                                 |                                                                                   |
| SAT INPUT PRE-AMPLIFIER  | ✓                                                                                 | -                                                                                 | ✓                                                                                 | -                                                                                 | ✓                                                                                 | -                                                                                 |
| SAT INPUT SLOPE ADJUSTER | ✓                                                                                 | -                                                                                 | ✓                                                                                 | -                                                                                 | ✓                                                                                 | -                                                                                 |
| TV LEVEL ADJUSTER        | ✓                                                                                 | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                 | -                                                                                 |
| Redundant power supply   | ✓                                                                                 |                                                                                   | ✓                                                                                 |                                                                                   | ✓                                                                                 |                                                                                   |
| DIMENSIONS               | 146x200x38mm                                                                      | 146x200x38mm                                                                      | 146x200x38mm                                                                      | 146x200x38mm                                                                      | 146x200x38mm                                                                      | 146x200x38mm                                                                      |

## Multi Wavelength optical Receivers

Optical receivers for capture the optical Multi-Wavelength signals by optical transmitters and convert it back into the original terrestrial and satellite TV signals.

A **single** device can receive **one or two complete satellite** orbital positions over a single optical fiber.

■ Up to 64 users

■ Legacy/SCR-dCSS automatic selection

■ 16 SCR/dCSS User band for each output

■ Automatic Control Gain

■ User band Freq. Plan up on customer request

■ Diagnostic/Status Led

|                                    | SCF316/2TC                                                   | SCF316/2     | SCF316/3TC    | SCF316/3      | SCF516/3                           |
|------------------------------------|--------------------------------------------------------------|--------------|---------------|---------------|------------------------------------|
|                                    |                                                              |              |               |               |                                    |
| DESCRIPTION                        | One satellite + Terrestrial feeds                            |              |               |               | Two satellites + Terrestrial feeds |
| OPTICAL INPUT                      | 1 (SC/APC)                                                   |              |               |               |                                    |
| OUTPUTS TV+SAT                     | 2                                                            |              |               |               |                                    |
| OUTPUTS TV                         | 2                                                            | -            | 1             | 1             | 1                                  |
| OPTICAL INPUT                      | -14... 0 dBm                                                 | -14... 0 dBm | -16... -8 dBm | -16... -8 dBm | -16... -8dBm                       |
| N° OF WAVELENGTHS                  | 3                                                            |              |               |               | 2                                  |
| SCR/dCSS OUTPUT LEVEL              | 85 dBμV                                                      |              |               |               |                                    |
| NUMBER SCR/dCSS USER BANDS PER OUT | 16                                                           |              |               |               |                                    |
| SCR/dCSS U.B. PLANS                | SKY ITALIA - SKY UK - MULTICHOICE - CYFROWY POLSAT - beIN TV |              |               |               |                                    |
| LEGACY MAX LEVEL                   | 75 dBμV                                                      | 75 dBμV      | 75 dBμV       | 75 dBμV       | 75 dBμV                            |
| TV OUT MAX LEVEL                   | 95 dBμV                                                      | -            | 90 dBμV       | 90 dBμV       | 90 dBμV                            |
| TV DIPLEXED OUT MAX LEVEL          | 85 dBμV                                                      | 85 dBμV      | 80 dBμV       | 80 dBμV       | 80 dBμV                            |
| TV OUTPUT ADJUSTER                 | 0... -20 dB                                                  | 0... -20 dB  | 0... -20 dB   | 0... -20 dB   | 0... -20 dB                        |
| DIN RAIL MOUNTING                  | ✓                                                            | -            | ✓             | -             | -                                  |
| DIMENSIONS                         | 135x106x45mm                                                 | 127x90x38mm  | 135x95x45mm   | 127x90x38mm   | 118x118x38mm                       |

## Single Wavelength optical Transmitters

Optical transmitters equipped with high-quality, low-distortion DFB lasers. Designed to simplify signal distribution, these single wavelength transmitters receive terrestrial TV signals or Terrestrial plus SAT-IF band, and seamlessly transmit them to up to **64 users** via a single fiber. A compact and reliable solution for modern **fiber-to-the-home** (FTTH).

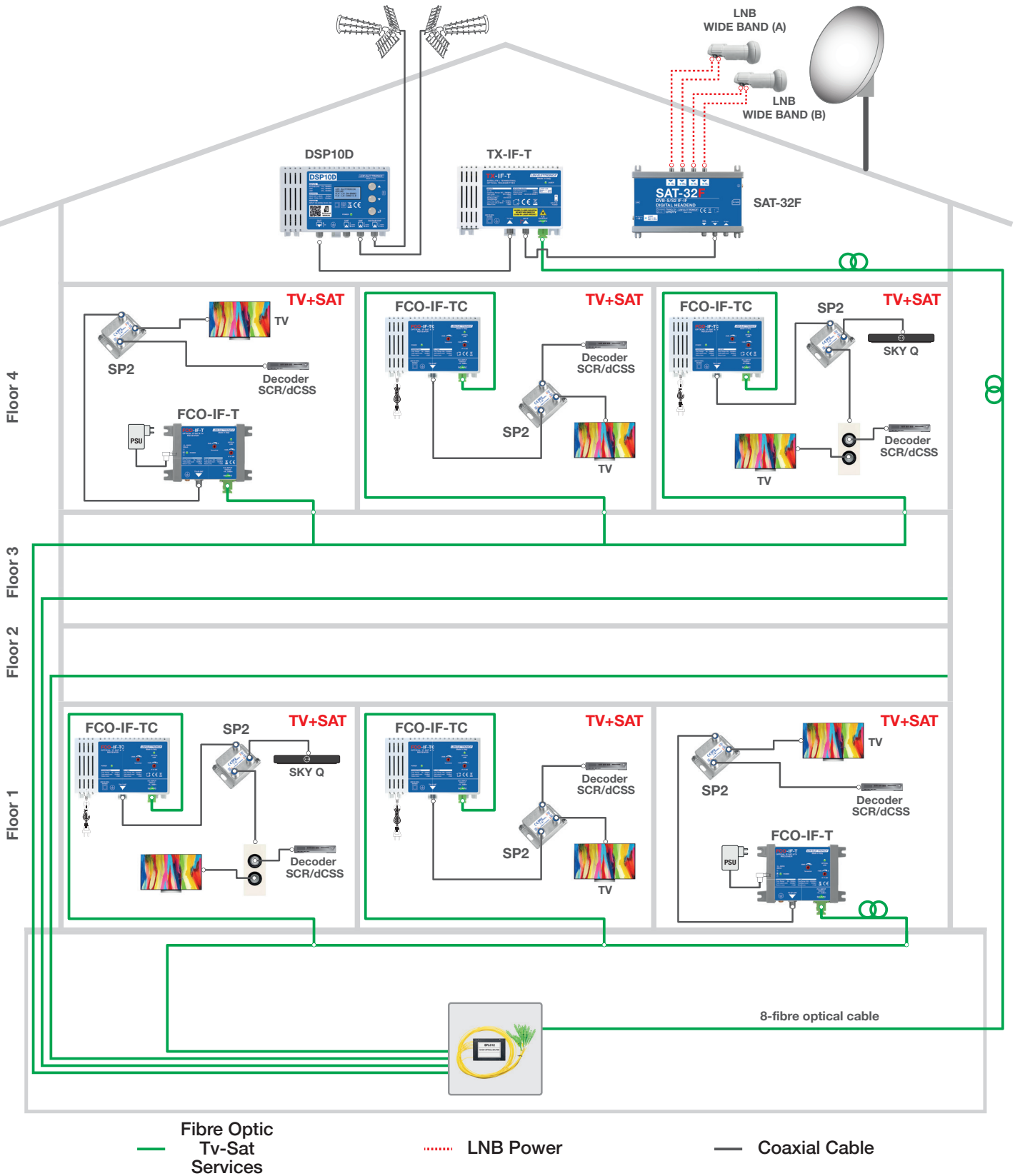
|                    | TX-IF-T         | TX-T         |
|--------------------|-----------------|--------------|
|                    |                 |              |
| RF INPUTS          | 2               | 1            |
| IF-SAT INPUT RANGE | 900... 2.200MHz | -            |
| IF-SAT REMOTE PWR  | 450mA           | -            |
| TV INPUT RANGE     | 80... 900MHz    | 80... 900MHz |
| OPTICAL OUTPUT     | 1 (SC/APC)      | 1 (SC/APC)   |
| OPTICAL POWER      | 7dBm            | 7dBm         |
| DIN RAIL MOUNTING  | ✓               | ✓            |
| DIMENSIONS         | 135x95x45mm     | 135x95x45mm  |

## Single Wavelength Terrestrial TV + IF-SAT optical receivers

Optical receivers for SAT-IF band and terrestrial signals to capture the optical Single-Wavelength signal transmitted by optical transmitters and convert it back into the original terrestrial and satellite SAT-IF signals.

|                     | FCO-IF-TC               | FCO-IF-T                | FCO-TC         | FCO-T          |
|---------------------|-------------------------|-------------------------|----------------|----------------|
|                     |                         |                         |                |                |
| DESCRIPTION         | TV Terrestrial + IF-SAT | TV Terrestrial + IF-SAT | TV Terrestrial | TV Terrestrial |
| OPTICAL INPUT       | 1 (SC/APC)              |                         |                |                |
| RF OUTPUTS          | 1                       |                         |                |                |
| OPTICAL INPUT       | -14... 0 dBm            |                         |                |                |
| SAT OUT MAX LEVEL   | 85 dBμV                 | 85 dBμV                 | -              | -              |
| SAT OUTPUT ADJUSTER | 0... -12 dB             | 0... -12 dB             | -              | -              |
| TV OUT MAX LEVEL    | 80 dBμV                 | 80 dBμV                 | 105 dBμV       | 105 dBμV       |
| TV OUTPUT ADJUSTER  | 0... -20 dB             | 0... -20 dB             | 0... -20 dB    | 0... -20 dB    |
| DIN RAIL MOUNTING   | ✓                       | -                       | ✓              | -              |
| DIMENSIONS          | 135x95x45mm             | 127x90x38mm             | 135x95x45mm    | 127x90x38mm    |

## FTTH for Terrestrial + SAT-IF of 2 Satellites



**WARRANTY**  
**5 YEARS**

### WARRANTY

Our company is proud to offer a 5-year warranty as part of our commitment to quality and customer satisfaction. This is made possible by our rigorous and technologically advanced approach.



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