

## Terrestrial and SAT signal amplifiers

### CNV 11 F

- Remotely powered postamplifier for terrestrial and SAT signals
- Powered by LNBS via the HF cable
- For single-antenna systems with long cable runs
- One input, one output
- LNB and postamplifier powered by the receiver or by multi-switch
- LES 2020 F line equalizer to balance frequency-dependent cable attenuation in distribution network at the end of this chapter
- Conforms to EN 50083-2
- HF connections: F-connectors



### CVE 235

- Head end amplifier for amplifying and merging satellite signals in the 1st IF band (950-2400 MHz) and terrestrial signals (47-862 MHz)
- For receiving analog and digital signals
- One input each for horizontally and vertical-polarized satellite signals
- The terrestrial signal is fed passively via one input to both outputs
- One output each for horizontal SAT signals and terrestrial - vertical SAT signals and terrestrial. For remote feeding of receiving systems via the SAT input (13 V / 18 V)
- Suitable for Twin LNBS
- Conforms to EN 50 083-1, -2
- HF-connections: F-connectors



### CNV 235 E

- Post-amplifier to balance attenuation loss in the distribution network
- Selective signal amplification of terrestrial and two SAT signals
- 20 dB level control for each band
- Powered via the DC input with power supply unit supplied
- Conforms to EN 50083-1, -2
- RF connections: F-connectors



- <sup>1)</sup> According to EN 50083, Part 5 for 2nd order interference products at 60 dB IMD
- <sup>2)</sup> According to EN 50083, Part 5 for 3rd order interference products at 60 dB IMD
- <sup>3)</sup> According to EN 50083, Part 5 for 2nd order interference products at 35 dB IMD
- <sup>4)</sup> According to EN 50083, Part 5 for 3rd order interference products at 35 dB IMD
- All values with level control at 0 dB and linear frequency response (0 dB equalization)

| Type                        | CNV 11 F  | CVE 235   | CNV 235 E   |
|-----------------------------|---|---|---|
| Order No.                   | 947 764-001                                       | 947 642-001                                       | 947 643-002                                       |
|                             |   |   |   |
| <b>47-862 MHz</b>           |   |   |   |
| Gain                        | 12 dB   | 29 dB   | - 5 dB  |
| Level adjuster              |   | 0-20 dB   |   |
| Equalizer                   |   | 0-20 dB   |   |
| Decoupling input to input   |   | 60-55 dB  |   |
| Decoupling output to output |   | 20-18 dB  |   |
| Output level                | 95 <sup>1</sup> / 113 <sup>2</sup><br>dB $\mu$ V  | 108 <sup>1</sup> / 118 <sup>2</sup><br>dB $\mu$ V |   |
| Noise figure                | 5 dB  | 4-5 dB  |   |
| Return loss input           |   | 12 dB   | 10 dB   |
| Return loss output          |   | 12 dB   | 13 dB   |
| <b>950-2150 MHz</b>         |   |   |   |
| Gain                        | 13-21 dB  | 36 dB   | 30-35 dB  |
| Level adjuster              |   | 0-20 dB   |   |
| Equalizer                   |   | 0-10 dB   |   |
| Decoupling input to input   |   | 60 dB   | 60 dB   |
| Decoupling output to output |   | 55 dB   |   |
| Decoupling input to output  |   | 60 dB   |   |
| Output level                | 103 <sup>3</sup> / 115 <sup>4</sup><br>dB $\mu$ V | 110 <sup>3</sup> / 121 <sup>4</sup><br>dB $\mu$ V | 110 <sup>3</sup> / 121 <sup>4</sup><br>dB $\mu$ V |
| Noise figure                | 6 dB  | 8 dB  | 8 dB  |
| Return loss input           |   | 10 dB   | 9 dB  |
| Return loss output          |   | 10 dB   | 10 dB   |
| <b>2150-2400 MHz</b>        |   |   |   |
| Gain                        | 20 dB   | 27 dB   | 27 dB   |
| Decoupling input to input   |   | 55 dB   | 55 dB   |
| Decoupling output to output |   | 55 dB   |   |
| Decoupling input to output  |   | 55 dB   |   |
| Output level                | 103 <sup>3</sup> / 113 <sup>4</sup><br>dB $\mu$ V | 107 <sup>3</sup> / 118 <sup>4</sup><br>dB $\mu$ V | 107 <sup>3</sup> / 118 <sup>4</sup><br>dB $\mu$ V |
| Noise figure                | 6 dB  |   | 8 dB  |
| Return loss input           |   | 8 dB  | 7 dB  |
| Return loss output          |   | 8 dB  | 8 dB  |
| <b>Operating conditions</b> |   |   |   |
| Remote feed voltage         | 13-18V, max 450 mA                                |   |   |
| Current consumption         | 35 mA   |   |   |
| Power consumption           | approx. 0.6 W                                     |   |   |
| Weight                      | 0.6 kg  | 1.5 kg  | 1.6 kg  |
| Dimensions WxHxD            | 80x44x25 mm                                       | 285x115x70  | 348x115x83 mm                                     |
| Operating voltage           |   | 230V~/50-60 Hz                                    | 230V~/50-60 Hz                                    |
| Operating temperature       | -20°C to +60°C                                    |   |   |