

# COMPACT OPTICAL CONVERTOR

dSCR GTU optical  
to RF convertor

**D000199**



Easy upgrade and  
maintains existing  
signal levels.  
Supports legacy,  
SCR and dSCR,

The dSCR GTU converts optical power to RF power (4 satellite bands and FM, DAB, DTT). Terrestrial signals are overlaid onto both output ports. All units have built in AGC which allows a wide dynamic range of optical levels without affecting output power and quality. One LED indicator allows the user to monitor the status of the unit. Able to work in legacy, analogue SCR (aSCR) and digital SCR (dSCR) modes.



#### FEATURES:

- Optical to RF convertor (Satellite and FM, DAB, DTT )
- Compatible with DStv, EN50494, EN50607, DStv Unicable/SCR Classic/Legacy
- Automatic Gain Control (AGC)
- LED Status indication for diagnostics



# DSCR GTU OPTICAL TO RF CONVERTOR



## TECHNICAL SPECIFICATIONS - D000199

| dSCR GTU                                      | Min.                      | Max.     | Notes                                   |
|-----------------------------------------------|---------------------------|----------|-----------------------------------------|
| <b>SATELLITE (ELECTRICAL)</b>                 |                           |          |                                         |
| RF frequency range (MHz)                      | 950                       | 2150     |                                         |
| Output impedance                              |                           | 75Ω      |                                         |
| Return loss                                   | 10dB                      |          |                                         |
| Gain variation across band                    |                           | 10dB     |                                         |
| Nominal output level (Legacy)                 |                           | 75dBμV * |                                         |
| Nominal output level (dSCR)                   |                           | 72dBμV * |                                         |
| Terrestrial rejection                         | 35dB                      |          |                                         |
| <b>DTT, DAB AND FM (ELECTRICAL)</b>           |                           |          |                                         |
| RF frequency range                            |                           |          |                                         |
| DTT                                           | 470-790MHz                |          |                                         |
| DAB                                           | 174-240MHz                |          |                                         |
| FM                                            | 88-108MHz                 |          |                                         |
| Nominal impedance                             | 75Ω                       |          |                                         |
| Return loss                                   | 8dB                       |          |                                         |
| Nominal DTT output Quad (Quatro)              | 71dBμV8                   |          | For 6 multiplexes                       |
| Gain variation across band                    |                           | 5dB      |                                         |
| 950-2150MHz rejection                         | 35dB                      |          |                                         |
| <b>FM, DAB, DTT &amp; SATELLITE (OPTICAL)</b> |                           |          |                                         |
| Optical wavelength                            | 1100nm to 1650nm          |          |                                         |
| Optical input power (typical)                 | -12dBm#                   | -3dBm    | #For systems with 19.2dB optical budget |
| <b>CONTROL SIGNALS (QUAD ONLY)</b>            |                           |          |                                         |
| Vertical select voltage                       | 11.5V                     | 14.0V    | 13V nominal                             |
| Horizontal select voltage                     | 16V                       | 19V      | 18V nominal                             |
| Low / High band                               | 0/22KHz tone              |          |                                         |
| <b>DC SPECIFICATION</b>                       |                           |          |                                         |
| Input voltage range                           | 20V                       |          |                                         |
| Current consumption                           | 430mA max                 |          |                                         |
| <b>CONNECTORS</b>                             |                           |          |                                         |
| Output                                        | F x 2                     |          |                                         |
| Power supply                                  | 2.1mm Jack                |          |                                         |
| Optical input                                 | FC/PC                     |          |                                         |
| <b>DIMENSIONS</b>                             |                           |          |                                         |
| Size excl. plastics (W x H x D)               | 134mm x 105mm x 43mm      |          |                                         |
| Size incl. plastics (W x H x D)               | 120.8mm x 80.1mm x 26.3mm |          |                                         |
| Weight                                        | 450g excluding PSU        |          |                                         |
| <b>Environmental Specification</b>            |                           |          |                                         |
| Operating temperature                         | 0°C to +50°C              |          |                                         |
| Storage temperature                           | -40°C to +70°C            |          |                                         |
| <b>OPTICAL CABLING</b>                        |                           |          |                                         |
| Fibre type                                    | Single mode               |          |                                         |
| Standard                                      | GI - approved G657a       |          |                                         |

