

Technical Specifications cont'

Parameter	Unit	Min.	Typ.	Max.
Gain Adjustment Range AGC: 30 dB dynamic range used (gain +36/+6 dB)	dB		35	
Nominal Output Levels: Satellite @ 2.15 GHz Satellite @ 1 GHz	dBm dBm	-37 -39	-35 -37	-33 -35
213 - 854 MHz rejection	dB	30		
Noise Figure @ Max Gain	dB			7
OIP3	dBm	2.5		
Isolation	dB	30		
In Band Spurious Power	dBc	25		
Integrated Phase Noise	°RMS			4
Output Frequency Accuracy / Stability	kHz			320
Terrestrial Output				
Parameter	Unit	Min.	Typ.	Max.
RF Frequency Range DTT DAB	MHz MHz	470 213		854 230
Return Loss	dB	10		
Gain @ 854 MHz with Max. Gain Set Gain @ 854 MHz with Min. Gain Set	dB dB		+29 -6	
Gain Slope 470 - 854 MHz	dB		2	
Gain Ripple Across Band	dB			6
Gain Ripple Across 8 Mhz	dB			0.5
Gain Adjustment Range (AGC: 30dB dynamic range used (gain +26/-4 dB)	dB		35	
Nominal Output Levels: DTT @ 854 MHz DTT @ 470 MHz DAB	dBm	-41 -43 -55	-39 -41 -53	-37 -39 -51
950 -2150 MHz Rejection	dB	25		
OIP3 470 - 860 MHz 213 - 230 MHz (dependent on gain setting)	dBm dBm	-10 -10		0 0
In Band Spurious Power	dBc	30		
General Technical Data				
Parameter	Unit	Min.	Typ.	Max.
Operating Temperature Range	°C	0		+50
Storage Temperature Range	°C	-10		+50
Power Consumption	mA			800
Power Supply Voltage (Plug to Optionally Supply Converter Externally)	V		6	
Optional Connector			FC/PC or SC/APC	
RF Output Connectors			5x F-Female	
Enclosure Dimensions	mm		165 x 155 x 30	

FibreIRSGTU

Quad (DTT & DAB)

- Optical to RF Converter
- Outputs all inputs (DTT, DAB plus 4 Universal LNB feeds) at their normal frequencies and in their conventional formats
- Fully compatible with conventional Sat and DTT STBs and TVs.
- Automatic gain control (AGC)



Technical Specifications

Optical Characteristics				
Parameter	Unit	Min	Typ	Max
Optical Wavelength	nm	1100	1310/1550	1650
Optical Return Loss	dB	40	45	
Optical Input Power	dBm	-15		0
Total RF Input Power	dBm	-50		-20
Nominal Satellite Transponder Levels	dBm	-72		-42
Nominal DTT Multiplex Levels	dBm	-65		-35
Nominal DAB Multiplex Levels	dBm	-79		-49
RF Frequency Range	MHz		213 - 5450 MHz DAB 213 - 230 MHz DTT 470 - 854 MHz SAT-IF 0.95-5.45 GHz	
Satellite Switching Outputs				
Parameter	Unit	Min.	Typ.	Max.
Horizontal High Band (1099 - 2149 MHz)	V	16.0 + 22 kHz	18.0 + 22 kHz	24.0 + 22 kHz
Vertical High Band (1100 - 2150 MHz)	V	11.0 + 22 kHz	13.0 + 22 kHz	15.0 + 22 kHz
Horizontal Low Band (949 - 1949 MHz)	V	16.0	18.0	24.0
Vertical Low Band (950 - 1950 MHz)	V	11.0	13.0	15.0
Return Loss	dB	10		
Nominal Impedance	Ω		75	
Gain @ 2.15 GHz with Max. Gain Set	dB	+4	+39	+9
Gain @ 2.15 GHz with Min. Gain Set	dB			
Gain Slope 0.95 - 2.15 GHz	dB		2	
Gain Ripple across Band	dB			6
Gain Ripple across 30 Mhz	dB			1