

AMC 28 Series C-Band Upconverter



Agilis AMC 28 Series C-Band Upconverter has been specially designed to exceed the performance of all currently available converters in the industry. The optimized design methodology that is applied in the development of the Agilis converters offers a very cost-effective solution to the customers, making the product unique in nature.

The IF to RF stage or RF to IF stage conversion, based on the function, is achieved through dual triple conversion technique, allowing no inversion at the output stage. The frequency step can be changed in increments of 125 KHz, enhancing the spectrum utilization. The phase noise characteristics of the converters meet or exceed IESS 308/309 requirements.

Agilis AMC 28 Series C-Band Upconverter has built-in test equipment that provides monitor and control of various converter operational parameters. The detected alarms are displayed using LEDs provided at the front panel of the AMC 28, which can be controlled remotely through a RS232 or RS485 interface. The unit is also provided with a built-in feature to operate in a 1:1 redundant configuration, avoiding the use of any additional hardware for the switching function.

The unit is packaged in a compact 19" rack mountable cabinet for easy installation.

Features

- Low Cost, Compact unit
- Dual Conversion, Non-inverting output
- Frequency Step Size of 125 KHz
- Built-in 1:1 Redundant Switch-over
- Available for specific satellite bands
- Remote Monitor and Control functions

Applications

- Satellite Earth Station
- Teleport

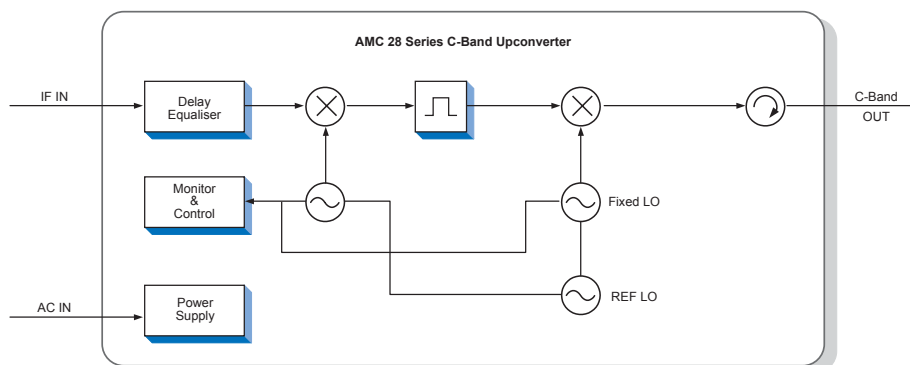
Reliability

Field proven with system deployed world-wide. Agilis IDU can withstand temperature from 0°C to +50°C up to 95% non-condensing humidity.

Quality Assurance

All Agilis IDUs are designed and manufactured according to ISO 9001 Standard.

TECHNICAL SPECIFICATIONS



Input Parameters

Frequency	70±18 / 140±36 MHz (Optional)
Impedance	50Ω
Return Loss	Better than 23 dB
Input Connector	BNC (F)

Output Parameters

Frequency	C-band
Impedance	50Ω
Return Loss	Better than 20 dB
Output Interface	N-type Female
Output Power @P1dB	0 dbm min

Transfer Parameters

Type	Dual Conversion
Frequency Spectrum	No inversion
Gain (IF to RF)	30 dB min
Gain Adjustment	25 dB
Gain Flatness	±0.25 dB over any 36 MHz Bandwidth
Gain Slope	±0.05 dB/MHz
Gain Stability	±0.25 dB over 24 Hrs at constant temperature
Spurious	
Carrier dependent	-80 dBm at max gain
Carrier independent	-60 dBc at max gain
Third Order Intermodulation	-44 dBc with two carriers at +5 dBm total power
Products	
Group Delay	
Linear	0.025 nsec/MHz
Parabolic	0.005 nSec/MHz
Ripple	1nsec Pk to Pk
Frequency Step Size	125 KHz
Freq Stability	±5 x 10 ⁻⁹ over 0°C to +50°C
Phase Noise	Meets Intelsat IESS 308/ 309
Monitor and Control	RS 232 / 485 control
LED indications	Power ON, LO alarm, Local /Remote

Rear Panel Connections

IF input	BNC Female
RF Output	N-type Female
10 MHz Ext REF Interface	SMA Female
Remote Interface	DB9 Female
AC Power IN	Three Pin Plug with EMI Filter

Monitoring And Control

Interface	RS 232 / RS485
Monitoring Parameters	LO Alarms Reference frequency monitor Frequency gain switch to redundant unit
Control Parameters	Unit has built-in feature for operation with 1:1 switch built-in
1:1 Redundancy	

Environmental

Operating Temperature	0°C to +50°C
Relative Humidity	up to 95% (Non-condensing)

Mechanical

Dimensions	480W x 530D x 90H mm
Weight	5 kg

Power Supply

AC Input Voltage	100 to 240Vac, 50/60 Hz
Power Consumption	75W

* All specifications are subject to changes without notice