

AUC5000 & APS5000

Block Upconverter & Protection Switch

Vislink's established lightweight, compact, 1U half rack electronics packages are ideally suited for flyaway or vehicle mounted solutions, where weight and space are at a premium. The 5000 series of electronics can be packaged in different lightweight, ruggedised canvas flight cases, depending on units selected and system configuration.

The APS5000 is a compact ½ rack width 1RU SHF Protection Switch covering C through to DBS TX Bands. The APS5000 is typically, but not exclusively, used with a pair of AUC58xx Advent BUCs to provide 1:1 protection. This is normally under control from a ASC5000 System Controller although the APS can function "stand-alone".



Key Features AUC5800

- The AUC5800 is a high performance
- block upconverter with the input at L
- Band and output versions for C, X, Ku,
- DBS and Ka Bands
- Internal / External reference
- High / Low gain options
- High stability
- Optional second SHF output for redundancy
- HPA control data pass-through
- 19" 1U HD SHF solution available with
- DVE5000 series and ADM5000
- Weather resistant for outdoor use

Key Features APS5000

- Provides hot-standby switching of a pair
- of SHF output signals from AUC5800, or
- other Block Upconverters
- Integral Phase Shifter for
- Phase-Combined applications
- Forward power monitor
- Status inputs from BUCs and HPAs
- M&C link to ASC5000

AUC5000

FREQUENCY RANGE

- Input Frequency Range
 - 950 to 1750 MHz
- Output Frequency Range
 - C Band AUC5806
 - 5.85 to 6.65 GHz
 - 5.925 to 7.129 GHz
 - X Band AUC5808
 - 7.9 to 8.4 GHz

Ku Band AUC5813 / 14

- 12.75 to 13.25 GHz
- 13.75 to 14.5 GHz
- 14.0 to 14.5 GHz

DBS Band AUC5817 / 18

- 17.3 to 18.1 GHz
- 17.6 to 18.4 GHz

Ka Band AUC5827 / 28 / 29 / 30

- 27.5 to 31.0
- (Specify 700 MHz Max Tx sub-band)

Others

- Any 800 MHz to order
- SHF 50 Ω N female (Ka band 2.9mm connector)
- L Band 50 Ω N female

HPA Control / Status / DC Input

- Weatherproof multi-pin

FREQUENCY REFERENCE

- Internal Frequency Accuracy
 - +/- 100 Hz from nominal at 25C
 - (+/- 80 Hz typically)

Internal Frequency Stability

- 2 x 10-8 Rack

External Reference (Internal link selectable)

- User supplied via L Band cable
- 10 MHz @ 0 dBm +/- 3 dB

GAIN

Input Power Level

- 10 dBm nominal, 0 dBm max

Output Power Level

- 5 dBm min at 1 dB compression point (+10 dBm to +35 dB with high gain option)

Gain

- 5 dBm to +20 dB nominal internally adjustable
- (+10 dBm to +35 dB high gain option)

Gain Variation

- +/- 0.25 dB any 36 MHz

- +/- 1.5 dB over 800 MHz
- +/- 0.25 dB over 24 hours @ constant temperature

Group Delay Variation

- +/- 0.25 ns in any 4 MHz

SSB Phase Noise

- Better than 6 dB below IESS308

VSWR

- Input Return Loss
- 12 dB @ 50 Ω

Output Return Loss

- 18 dB @ 50 Ω

SPURIOUS

Modulated

- 60 dBc

Unmodulated

- 65 dBm

Harmonics

- 20 dBc

HPA CONTROLLER

- Pass-through and protocol transfer of HPA control data from L Band input to RS485 HPA control output - Xicom, CPI, e2V, Paradise supported, others to order

ENVIRONMENTAL & PHYSICAL

Temperature

Operational:

- 20°C to +60°C(4°F to 140°F)

Storage:

- 20°C to +80°C(-4°F to 176°F)

Size

- 210mm wide x 350mm deep
- (8.27 inches wide x 13.78 inches deep)
- 1U half rack width

Weight

- 2 Kg (4.4lbs)

Power

- Phantom from L Band or 18V DC / 1A

Connectors

- SHF 50 Ω N female (Ka band 2.9mm connector)
- L Band 50 Ω N female

HPA Control / Status / DC Input

- Weatherproof multi-pin

APS5000

SWITCH DRIVES

- Internal coaxial switch
- Two switch drives for external switches

REMOTE CONTROL

- RS485 9600 baud

RF

- Input / output frequency range: 4-18GHz
- Input loss . . . 4 dB + 0.3 dB nominal
- Input level . . . +30 dBm max
- Input/output return loss . . . 16 dB at 50 Ω

CONNECTIONS

RF Inputs

- Female N-type 50 Ω

- RS485 comms
- Switch drives

- Status inputs

POWER

- 18Vdc from AUC5800 or via external 12-18 Vdc

SUPPLY

ENVIRONMENTAL & PHYSICAL

Operational Temperature:

- 0°C to +50°C (32°F to 122°F)

Storage Temperature

- 20°C to +70°C (-4°F to 158°F)

Size

- 210mm wide x 350mm deep
- (8.27 inches wide x 13.78 inches deep)
- 1U half rack width

Weight

- 1.2 Kg (2.6lbs)

Frequency

- 47 to 63 Hz @ <50W

Operating Voltage

- 100 - 240 Vac +/- 10%

