

Quatro LNB



TCG15AD Quatro LNB

| Gain | 60dB |
|--------------------|-----------|
| Noise Low band | 6dB |
| Noise High Band | 1.2dB |
| Output Frequency95 | 0-2050MHz |
| Switching | N/A |
| Power Consumption | 250mA |

TCG15 AD Quatro £16.90

Circuit of a TCG15 AD



220mm Wall Bracket

Dish Specification OA36G 60CM Gain.....35dB Elevation Adjustment......16-50Deg Wind load up to 20m mounting height.....N280 Weight.....1.6Kg **Price £49.50 WB 1** £25.98 60CM Dish sizes: 50 cm 60 cm 75 cm 90 cm 120 cm 480mm **WB 2** £29.76



Double LNB Mount Receive from two satellites with 2 LNB'S and one dish. Eutelsat (13 deg East) Astra19.2^{deg}East



OP O8C

480mm Wall Bracket

Astra 2B and 2D have the smallest footprints out of all the Astra transponders beamed towards the UK and Europe.

It can be seen from the illustrated footprint that a 60cm dish provides good reception in the whole of the UK and Ireland.

Specifications subject to change



SATELLITE DISTRIBUTION AMPS

Discontinued



| Туре | Frequency MHz | Gain MHz 40-860 | Gair 950 | 1 MHz 2400 | Max output 35dB IMA3 | Noise > 950 MHz | LNB power | Voltage | Max through current | Price |
|----------|------------------|--------------------|-------------|---------------|-------------------------|--------------------|--------------|-----------------|---------------------------|---------|
| | | | | | | | | | | |
| VS 93B | 87-862/950-2400 | 13-18dB | 27dB | 35dB | 115dBuV | ≤ 7dB | 18V 300mA | 220/240VAC 14VA | | £96.43 |
| TS3059SF | 40-860/950-2150 | 28dB | 22dB | 28dB | 116dBuV | ≤ 7dB | 12V 400mA | 220/240VAC 5VA | | £125.69 |
| TS4060S | 40-860/950-2400 | ≤1dB | 40dB | 40dB | 120dBuV | ≤ 4dB | 14V/18V 250m | 220/240VAC 14VA | | £108.85 |



TDY 40 Satellite Multiswitch Amplifier

Adjustable gain controls and slope equalization Gain adjustable to 30dB



DV25 Isolated terminator £1.49 DV49A Quick coupler £1.00





The TDY40 amplifier is only required to compensate for long cable runs or larger systems. Switches illustrated below and on following page have internal amplification

Technical Info

| Frequency range | 950-2150 MHz |
|-------------------------------------|---------------------|
| Gain | 1030 dB |
| Output level | I I 5dBuV |
| (3.order EN50083-3, 35 dB) | |
| Adjustable attenuation | 020 dB |
| Slope | 0,4,8,12 dB |
| Isolation trunk | 40 dB typ. |
| Connectors F-socket | |
| | |
| DC supply voltage | Via F-socket |
| | |
| Operating voltage DC | 1318 |
| Current consumption | 200 mA |
| DC bypass | Yes |
| Screening factor | Class A, EN 50083-2 |
| Dimensions (width x height x depth) | 129 x 86 x 32 mm |
| Operating temperature range | -20+50 °C |
| Weight | 0,290 g |
| | |





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Technical data

Impedance

Control signal

Connectors

Colour-coding

Power indicator

Screening factor

Note

Operating voltage

Satellite Switches

Quad band LNB and terrestrial inputs. 8 outputs for 4 sat receivers, cascadable for multiple outputs.



Quad band LNB and terrestrial inputs. 16 outputs for 8 sat receivers, cascadable for





See page 26B for Sky Q Systems

Incredible Satellite Switches

Except for powering the LNB these active switches use 43ma of power (Normal LNB takes 250 mA) from the set top box to power the amplification. The amplification eliminates the normal tap side loss so less front end amplification is often not needed on many smaller systems.

Systems then can be deployed without the need for providing several power supplies around the network.



Plastic mounting brackets provided



DV49

Coupler to link switches. £1.00



DV25

75 Ohm DC Isolated load. £1.49



| Type Input frequencies, 4 Satellite | e Bands , 1 Terrestrial | TXPSQ 508 C | TXPSQ 512 C 18862 MHz 9502400 MHz | TXPSQ 516 C |
|---|---|-------------------------------------|---|--------------------|
| Outputs to subscribers | (two outputs needed for most modern STB,s) | 8 | 12 | 16 |
| Switching method | | 14 V / 18 V / 0/22 kHz / DiSEqC 1.0 | | |
| Through loss | 950-2400MHz | -1dB+2dB +/- 1.5dB | -1dB+3.5dB +/- 2dB | -1dB+3.5dB +/- 2dB |
| Tap loss | loss 18-862 MHz | | 3dB +/- 3dB | 3dB +/- 3dB |
| Isolation Terr./Sat | | | 30 dB typ. | |
| Isolation H/V | | | 30 dB typ. | |
| Return loss (input and output) | 182400 MHz | | 10 dB typ. | |
| Input level Sat | | | | |
| Sat output level | | | 102 dBµV max. (IMD3 35 dB) | |
| err. output level 88 dBµV max. (IMD3 60 dB) | | | | |
| Current consumption from Set to | rent consumption from Set top box 43 mA max. | | | |
| Supply current to LNB via powe | er supply | 900 mA max. | | |
| Dimensions (W x H x D) | | 140 x 110 x 63 mm | 140 x 150 x 63 mm | 140 x 150 x 63 mm |
| Price | | £58.74 | £89.60 | £99.55 |

Note . What has a major effect on system design is the number of Digital Sat and Terrestrial channels distributed and the difference in input levels.

Use coaxial cable for the network such as CT100 (RG6) and CT167 for longer main feed runs . CT100 (RG6) has a loss of more than 10dB greater per 100m at 2400MHz than at UHF 860MHz , however terrestrial digital TV channels needs about 30dB less than analogue at the receiver so if you add a design margin of 10dB there is a 20dB advantage using terrestrial digital and the higher frequencies used for satellite are offset even more due to the much lower signal levels needed for sat reception , due to the type of robust modulation employed in DVB-S2 and DVB-S2 (QPSK 8QPSK). If technical advise is needed in configuring your system design , please do not hesitate to call on our main phone number and ask for technical support.





Amplifier for Satellite Switches

Create large systems using these amplifiers, can be used to drive 100 meters + of CT167 (-23dB attenuation at 2,400MHz)



Prices Ex VAT

www.txsystems.co.uk Specifications subject to update

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OUTLET SOCKETS



TXAO1 Single coax output 0-860MHz



TXAO4 Screened twin F connector, twin

standard coax socket outlet. 2 in 4 out use this socket for Sky, Freesat, Preeview, DAB and FM radio.



Outlet for Sky Freesat, Freeview B and FM Radio

UHF-





Can also connect to TV,s or Freeview set top boxes using a splitter, with power through one

TXS

On current installations outlet sockets are not isolated as in the past (BS415) due to voltages from the TV or set top box needing to feed LNB's or Sat switches so a CATV system needs earth bonding.

Earth bonding points are usually located on taps, splitters and amplifiers.

However in the event of coax cables being installed on long runs close to high voltage cables, mains etc from a tap or splitter to the outlet plate use an in line ground block as high voltages can be induced into the coax cable.

See connector page in our catalogue.









TXS Satellite Switches

Simple to install, simple to commision



The power supplies indicated at each location can be located elsewhere on the system, to suite ease of supplying mains power.

Also on larger powers you could power the whole system located at the head end depending on the design. The load current is relatively low due the amplification in the switches being powered by the set top box from the DC power normally used to power a domestic LNB.

For help with system design please contact our technical support. 0161 818 7649





Above is a typical system distributing analogue or digital satellite channels plus terrestrial VHF and UHF.

For large systems this is the only optional way of distributing satellite if the running multiple underground trunk cables is prohibitive.

Systems of over a thousand points can be constructed using coax or tens of thousands of points using a hybrid fibre/coax system The limitations to the size of system are the same as existing cable networks except greater care has to be taken in calculating frequency response errors at higher frequencies.

The limitations of using a single cable for distribution of satellite is bandwidth, and the software in sky digiboxes being unable to locate transponders, that have been relocated in the IF spectrum.

There are various partial solutions to this software problem,see our website ,but at the moment no complete solution unless Sky update the receiver software in the future. As more channels are allocated various options can be used to optimize the available bandwidth .

For example, using satellite demodulators and remodulating, programmes that are broadcast clear in the UHF or VHF band, makes more capacity available in the one to two GHz spectrum for subscription programmes.

Digital broadcast make more efficient use of bandwidth and as broadcasters move over to digital more channels can be distributed in the available bandwidth . If the most efficient current technology is used a single coax system can carry fourteen hundred and seventy channels.