## $T$ RIAX <br> connecting the future



Dependability guaranteed

## Contents

At a Glance
TRIAX Multiswitch key features ..... 4-5
Technical Specifications
Standalone 5 ..... 6
Standalone 9 ..... 7
Standalone Pro 5 ..... 8
Standalone Pro 9 ..... 9
Cascade 5 ..... 10
Cascade 9 ..... 11
Cascade 13 ..... 12
Cascade 17 ..... 13
Application examples
TRIAX Multiswitch installation schematics ..... 14-15

## Accessories



## DEPENDABILITY <br> GUARANTEED

Designed in Europe and built to last: a 6-year warranty is our guarantee that TRIAX's core values of reliability and innovation are the foundation of our new multiswitches.


## FLEXIBILITY AT THE

 FLICK OF A SWITCHAll the functionality you need in a simplified, streamlined range: every new TRIAX multiswitch has an active/passive terrestrial switch for easier stock maintenance and maximum versatility in any installation.


CONVENIENCE AT EVERY STEP

Designed with installer convenience in mind: we've packed our new range of TRIAX multiswitches full of features to make installations easier to check, build, expand and maintain.

## Regional experts dedicated to your business <br> TRIAX Support and Service

At TRIAX, we're committed to delivering exceptional service before, during and after installation to help you get the very best from our high-quality, reliable products.

Our team of dedicated project support staff are at your side to provide design services, advice or technical support for your next installation. We talk your language and stay fully up to date with local requirements and regulations.

Simply contact one of our offices below, or for details of all 10 regional locations, visit triax.com/offices.

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## At a glance

## Key features of the TRIAX Multiswitch range

Every aspect of the new TRIAX multiswitch range is designed with installer convenience in mind.
Quality, dependable products that last. Versatile functionality, making it easier to stock and select the right product for the installation.

Features and performance to match the most stringent demands and directives. Compact design and handy accessories to save space in even the tightest technical cabinet, for tidier, easier installations.

It's all backed up with the dedicated project support and service you expect from TRIAX.

## Excellent performance

- Low insertion loss
- High isolation
- Low power consumption


## Reduced footprint

- Tidier, more compact installations in even the tightest of spaces
- Optional spacers available



## Pro features

Fine tune your network

- Make all the adjustments you need, with our Standalone Pro models


## Flexible range

- Easier to select the right product
- Fewer products to stock
- Quad and Quattro LNB compatible


## RED compliant

- High quality, reliable performance



## UK features

Regional experts dedicated to your business

- All our multiswitches are also available in the UK with local power supplies, earth bars and up-to-date regulatory markings - look out for the UK-specific product numbers in the technical specifications.


## Dependable, flexible, convenient

Equidistant F-connectors
Easily expand your network: all multiswitches fit together like building blocks, with enough space to comfortably screw on connectors

## ESD Protection

: Safety on all inputs \& subscriber outputs


Flexible power injection
Connect to DC wherever is most practical in your cascade network:
all multiswitches can bear 3 amps per local injection and 2 amps per sat line

## Standalone 5

## $6,8,12,16,24,32$ outputs

Standalone multiswitch range for 1 Satellite position with 5 inputs and 6 to 32 outputs, suitable for distributing satellite and terrestrial signals in small and medium sized systems.

The TMS 5 S series offers excellent performance and flexibility, with a compact design for installations even in confined spaces.


| Feature | EU version | $\begin{gathered} \text { TMS/CKR } \\ 5 \times 6 \text { S } \end{gathered}$ | $\begin{gathered} \text { TMS/CKR } \\ 5 \times 8 \mathrm{~S} \end{gathered}$ | $\begin{gathered} \text { TMS/CKR } \\ 5 \times 12 \mathrm{~S} \end{gathered}$ | $\begin{gathered} \text { TMS/CKR } \\ 5 \times 16 \mathrm{~S} \end{gathered}$ | $\begin{gathered} \text { TMS/CKR } \\ 5 \times 24 \mathrm{~S} \end{gathered}$ | $\begin{gathered} \text { TMS/CKR } \\ 5 \times 32 \mathrm{~S} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Art. no. |  | 318601 | 318602 | 318603 | 318604 | 318605 | 318606 |
| Frequency range TER | Active / Passive (via switch) | $47-694 \mathrm{MHz} / 5-862 \mathrm{MHz}$ |  |  |  |  |  |
| Frequency range SAT |  | $950-2200 \mathrm{MHz}$ |  |  |  |  |  |
| Supported LNB |  | QUAD/QUATTRO |  |  |  |  |  |
| Inputs SAT + TER (F-type connectors) |  | 5 |  |  |  |  |  |
| Subscriber Outputs (F-type connectors) |  | 6 | 8 | 12 | 16 | 24 | 32 |
| TER Subscriber loss | TER active / TER passive | $0 \pm 2 \mathrm{~dB} / 23 \pm 2 \mathrm{~dB}$ |  | $0 \pm 2 \mathrm{~dB} / 27 \pm 2 \mathrm{~dB}$ |  | $0 \pm 2 \mathrm{~dB} / 33 \pm 2 \mathrm{~dB}$ |  |
| SAT Subscriber gain with 5dB slope |  | $-2 \ldots+3 \pm 2 \mathrm{~dB}$ |  |  |  | $-4 \ldots+1 \pm 2 \mathrm{~dB}$ |  |
| Isolation | SAT to TER <br> Cross polarisation H/V | 30 dB <br> 30 dB |  |  |  |  |  |
|  | Tap-Tap TER / Tap-Tap SAT | $25 \mathrm{~dB} / 30 \mathrm{~dB}$ |  |  |  |  |  |
| Max. input level | TER / SAT | 90dB $\mu \mathrm{V} / 97 \mathrm{~dB} \mu \mathrm{~V}$ |  |  |  | $90 \mathrm{~dB} \mu \mathrm{~V} / 99 \mathrm{~dB} \mu \mathrm{~V}$ |  |
| Max. output level | TER active (IMA ${ }^{3} 60 \mathrm{~dB}$ ) SAT (IMA ${ }^{3} 35 \mathrm{~dB}$ ) | $\begin{gathered} 90 \mathrm{~dB} \mu \mathrm{~V} \\ 100 \mathrm{~dB} \mu \mathrm{~V} \end{gathered}$ |  |  |  |  |  |
| Return loss | TER/SAT (input) TER/SAT (Tap output) | $\begin{aligned} & >10 \mathrm{~dB} \\ & >10 \mathrm{~dB} \end{aligned}$ |  |  |  |  |  |
| Noise figure | TER active | $\leq 7 \mathrm{~dB}$ |  |  |  |  |  |
| Switching commands |  | DiSEqC $1.0 / 2.0,13 \mathrm{~V}, 18 \mathrm{~V}, 13 \mathrm{~V} 22 \mathrm{KHz}, 18 \mathrm{~V} 22 \mathrm{KHz}$ |  |  |  |  |  |
| Power consumption | Multiswitch power consumption | 3W Max.(TER Active) 2W Max.(TER Passive) |  | 3.5W Max.(TER Active) 2W Max.(TER Passive) |  |  |  |
|  | Max. current to LNB | 1A |  |  |  |  |  |
|  | Max. current from receiver | < 50 mA |  |  |  |  |  |
| Power supply voltage |  | 180... 264 VAC |  |  |  |  |  |
| Operating temperature |  | $-20 . .+55^{\circ} \mathrm{C}$ |  |  |  |  |  |
| Dimensions (W $\times L \times$ ) |  | $250 \times 140 \times 65 \mathrm{~mm}$ |  |  |  | $330 \times 140 \times 65 \mathrm{~mm}$ |  |
| Weight |  | 725 g | 735 g | 785 g | 800g | 1040g | 1070g |
| Feature | UK version | - | $\begin{aligned} & \text { TMS/CKR } \\ & 5 \times 8 \text { S BS } \\ & \hline \end{aligned}$ | TMS/CKR <br> $5 \times 12$ S BS | TMS/CKR $5 \times 16$ S BS | $\begin{aligned} & \text { TMS/CKR } \\ & 5 \times 24 \text { S BS } \end{aligned}$ | $\begin{aligned} & \text { TMS/CKR } \\ & 5 \times 32 \text { S BS } \end{aligned}$ |
| Art. no. |  |  | 318621 | 318622 | 318623 | 318624 | 318625 |

## Standalone 9

## $8,12,16,24,32$ outputs

Standalone multiswitch range for 2 Satellite positions with 9 inputs and 8 to 32 outputs, suitable for distributing satellite and terrestrial signals in small and medium sized systems.

The TMS 9 S series offers excellent performance and flexibility, with a compact design for installations even in confined spaces.


| Feature |  | $\begin{gathered} \text { TMS/CKR } \\ 9 \times 8 \mathrm{~S} \end{gathered}$ | $\begin{gathered} \text { TMS/CKR } \\ 9 \times 12 \mathrm{~S} \end{gathered}$ | $\begin{gathered} \text { TMS/CKR } \\ 9 \times 16 \text { S } \end{gathered}$ | $\begin{gathered} \text { TMS/CKR } \\ 9 \times 24 \mathrm{~S} \end{gathered}$ | $\begin{gathered} \text { TMS/CKR } \\ 9 \times 32 \mathrm{~S} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Art. no. |  | 318702 | 318703 | 318704 | 318705 | 318706 |
| Frequency range TER | Active / Passive (via switch) | $47-694 \mathrm{MHz} / 5-862 \mathrm{MHz}$ |  |  |  |  |
| Frequency range SAT |  | $950-2200 \mathrm{MHz}$ |  |  |  |  |
| Inputs SAT + TER (F-type connectors) |  | 9 |  |  |  |  |
| Subscriber Outputs (F-type connectors) |  | 8 | 12 | 16 | 24 | 32 |
| TER Subscriber loss | TER active / TER passive | $0 \pm 2 \mathrm{~dB} / 23 \pm 2 \mathrm{~dB}$ | $0 \pm 2 \mathrm{~dB} / 27 \pm 2 \mathrm{~dB}$ |  | $0 \pm 2 \mathrm{~dB} / 33 \pm 2 \mathrm{~dB}$ |  |
| SAT Subscriber gain with 5dB slope |  | $0 . . .+5 \pm 2 \mathrm{~dB}$ | $-3 \ldots+2 \pm 2 \mathrm{~dB}$ |  | $-4 \ldots+1 \pm 2 \mathrm{~dB}$ |  |
| Isolation | SAT to TER / Cross polarisation H/V | $30 \mathrm{~dB} / 30 \mathrm{~dB}$ |  |  |  |  |
|  | Tap-Tap TER / Tap-Tap SAT | $25 \mathrm{~dB} / 30 \mathrm{~dB}$ |  |  |  |  |
| Max. input level | TER / SAT | $90 \mathrm{~dB} \mu \mathrm{~V} / 95 \mathrm{~dB} \mu \mathrm{~V}$ | $90 \mathrm{~dB} \mu \mathrm{~V} / 98 \mathrm{~dB} \mu \mathrm{~V}$ |  | $90 \mathrm{~dB} \mu \mathrm{~V} / 99 \mathrm{~dB} \mu \mathrm{~V}$ |  |
| Max. output level | TER active (IMA ${ }^{3}$ 60dB) SAT (IMA ${ }^{3} 35 \mathrm{~dB}$ ) | $\begin{gathered} 90 \mathrm{~dB} \mu \mathrm{~V} \\ 100 \mathrm{~dB} \mu \mathrm{~V} \end{gathered}$ |  |  |  |  |
| Return loss | TER/SAT (input) <br> TER/SAT (Tap output) | $\begin{aligned} & >10 \mathrm{~dB} \\ & >10 \mathrm{~dB} \end{aligned}$ |  |  |  |  |
| Noise figure | TER active |  |  | $\leq 7 \mathrm{~dB}$ |  |  |
| Switching commands |  | DiSEqC 1.0 / 2.0, 13V, 18V, $13 \mathrm{~V} 22 \mathrm{KHz}, 18 \mathrm{~V} 22 \mathrm{KHz}$ |  |  |  |  |
| Power consumption | Multiswitch power consumption | 3.5W Max.(TER Active), 2W Max.(TER Passive) |  |  |  |  |
|  | Max. current to LNB | 1A |  |  |  |  |
|  | Max. current from receiver | $<50 \mathrm{~mA}$ |  |  |  |  |
| Power supply voltage |  | 180... 264 VAC |  |  |  |  |
| Operating temperature |  | $-20 \ldots+55^{\circ} \mathrm{C}$ |  |  |  |  |
| Dimensions (W x L x D ) |  | $270 \times 140 \times 65 \mathrm{~mm}$ |  |  | $370 \times 140 \times 65 \mathrm{~mm}$ |  |
| Weight |  | 805 g | 840 g | 855 g | 1140 g | 1170g |

## TRIAX

## Standalone 5 Pro*

## $8,12,16,24,32$ outputs

Standalone multiswitch range for 1 Satellite position with 5 inputs and 8 to 32 outputs, suitable for distributing satellite and terrestrial signals in small and medium sized systems.

The TMS 5 S PRO series offers excellent performance, with the ability to adjust input and output levels, and a compact design for installations even in confined spaces.
*Available later in 2022

| Feature |  | TMS/CKR PRO $5 \times 8 \mathrm{~S}$ | TMS/CKR PRO 5x12 S | $\begin{gathered} \text { TMS/CKR PRO } \\ 5 \times 16 \mathrm{~S} \end{gathered}$ | $\begin{gathered} \text { TMS/CKR PRO } \\ 5 \times 24 \text { S } \end{gathered}$ | TMS/CKR PRO $5 \times 32 \mathrm{~S}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Art. no. |  | 318608 | 318609 | 318610 | 318611 | 318612 |
| Frequency range TER | Active / Passive (via switch) | 47-694 MHz / 5-862 MHz |  |  |  |  |
| Frequency range SAT |  | $950-2200 \mathrm{MHz}$ |  |  |  |  |
| Supported LNB |  | QUAD/QUATTRO |  |  |  |  |
| Inputs SAT + TER (F-type connectors) |  | 5 |  |  |  |  |
| Subscriber Outputs (F-type connectors) |  | 8 | 12 | 16 | 24 | 32 |
| TER Subscriber loss | TER active / TER passive | $\begin{aligned} & 0 \pm 2 \mathrm{~dB} / \\ & 23 \pm 2 \mathrm{~dB} \end{aligned}$ | $\begin{aligned} & 0 \pm 2 \mathrm{~dB} / \\ & 27 \pm 2 \mathrm{~dB} \end{aligned}$ |  | $\begin{aligned} & 0 \pm 2 \mathrm{~dB} / \\ & 33 \pm 2 \mathrm{~dB} \\ & \hline \end{aligned}$ |  |
| SAT Subscriber gain with 5dB slope |  | $-2 \ldots+3 \pm 2 \mathrm{~dB}$ |  |  | $-4 \ldots+1 \pm 2 \mathrm{~dB}$ |  |
| Isolation | SAT to TER Cross polarisation H/V | $\begin{aligned} & 30 \mathrm{~dB} \\ & 30 \mathrm{~dB} \end{aligned}$ |  |  |  |  |
|  | Tap-Tap TER / Tap-Tap SAT | $25 \mathrm{~dB} / 30 \mathrm{~dB}$ |  |  |  |  |
| Max. input level | TER / SAT | $90 \mathrm{~dB} \mu \mathrm{~V} / 97 \mathrm{~dB} \mu \mathrm{~V}$ |  |  |  |  |
| Input level control | TER /SAT | 0-15dB (TER active) / 0-10dB |  |  |  |  |
| Max. output level | TER active (IMA ${ }^{3}$ 60dB) SAT (IMA ${ }^{3} 35 \mathrm{~dB}$ ) | $\begin{gathered} 90 \mathrm{~dB} \mu \mathrm{~V} \\ 100 \mathrm{~dB} \mu \mathrm{~V} \end{gathered}$ |  |  |  |  |
| Output level control | via switch | - |  |  | 0dB / -6dB / -12dB |  |
| Return loss | TER/SAT (input) <br> TER/SAT (Tap output) | $\begin{aligned} & >10 \mathrm{~dB} \\ & >10 \mathrm{~dB} \end{aligned}$ |  |  |  |  |
| Noise figure | TER active | $\leq 7 \mathrm{~dB}$ |  |  |  |  |
| Switching commands |  | DiSEqC $1.0 / 2.0,13 \mathrm{~V}, 18 \mathrm{~V}, 13 \mathrm{~V} 22 \mathrm{KHz}, 18 \mathrm{~V} 22 \mathrm{KHz}$ |  |  |  |  |
| Power consumption | Multiswitch power consumption | 3.5W Max.(TER Active), 2.5W Max.(TER Passive) |  |  |  |  |
|  | Max. current to LNB | 1A |  |  |  |  |
|  | Max. current from receiver | < 50 mA |  |  |  |  |
| Power supply voltage |  | 180... 264 VAC |  |  |  |  |
| Operating temperature |  | $-20 . . .55^{\circ} \mathrm{C}$ |  |  |  |  |
| Dimensions ( $W \times L \times D$ ) |  | $285 \times 225 \times 60 \mathrm{~mm}$ |  |  | $385 \times 225 \times 60 \mathrm{~mm}$ |  |
| Weight |  | 835 g | 885 g | 900 g | 1115 g | 1140 g |

## Standalone 9 Pro*

## 16, 24, 32 outputs

Standalone multiswitch range for 2 Satellite positions with 9 inputs and 16 to 32 outputs, suitable for distributing satellite and terrestrial signals in small and medium sized systems.

The TMS 9 S PRO series offers excellent performance, with the ability to adjust input and output levels, and a compact design for installations even in confined spaces.
*Available later in 2022

| Feature |  | TMS/CKR PRO 9x16 S | $\begin{gathered} \text { TMS/CKR PRO } \\ 9 \times 24 \text { S } \end{gathered}$ | $\begin{gathered} \text { TMS/CKR PRO } \\ 9 \times 32 \mathrm{~S} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Art. no. |  | 318710 | 318711 | 318712 |
| Frequency range TER | Active / Passive (via switch) | 47-694 MHz / 5-862 MHz |  |  |
| Frequency range SAT |  | $950-2200 \mathrm{MHz}$ |  |  |
| Inputs SAT + TER (F-type connectors) |  | 9 |  |  |
| Subscriber Outputs (F-type connectors) |  | 16 | 24 | 32 |
| TER Subscriber loss | TER active / TER passive | $0 \pm 2 \mathrm{~dB} / 27 \pm 2 \mathrm{~dB}$ | $0 \pm 2 \mathrm{~dB} / 33 \pm 2 \mathrm{~dB}$ |  |
| SAT Subscriber gain with 5dB slope |  | $-2 \ldots+3 \pm 2 \mathrm{~dB}$ | $-4 \ldots+1 \pm 2 \mathrm{~dB}$ |  |
| Isolation | SAT to TER <br> Cross polarisation H/V | 30dB <br> 30 dB |  |  |
|  | Tap-Tap TER / Tap-Tap SAT | $25 \mathrm{~dB} / 30 \mathrm{~dB}$ |  |  |
| Max. input level | TER / SAT | $90 \mathrm{~dB} \mu \mathrm{~V} / 97 \mathrm{~dB} \mu \mathrm{~V}$ |  |  |
| Input level control | TER /SAT | 0-15dB (TER active) / 0-10dB |  |  |
| Max. output level | TER active (IMA ${ }^{3}$ 60dB) SAT (IMA ${ }^{3} 35 \mathrm{~dB}$ ) | $\begin{gathered} 90 \mathrm{~dB} \mu \mathrm{~V} \\ 100 \mathrm{~dB} \mu \mathrm{~V} \end{gathered}$ |  |  |
| Output level control | via switch | - | 0dB / -6dB / -12dB |  |
| Return loss | TER/SAT (input) TER/SAT (Tap output) | $\begin{aligned} & >10 \mathrm{~dB} \\ & >10 \mathrm{~dB} \end{aligned}$ |  |  |
| Noise figure | TER active |  | $\leq 7 \mathrm{~dB}$ |  |
| Switching commands |  | DiSEqC 1.0 / 2.0, 13V, 18V, $13 \mathrm{~V} 22 \mathrm{KHz}, 18 \mathrm{~V} 22 \mathrm{KHz}$ |  |  |
| Power consumption | Multiswitch power consumption | 3.5W Max.(TER Active), 2.5W Max.(TER Passive) |  |  |
|  | Max. current to LNB | 1A |  |  |
|  | Max. current from receiver | < 50mA |  |  |
| Power supply voltage |  | 180... 264 VAC |  |  |
| Operating temperature |  | $-20 \ldots+55^{\circ} \mathrm{C}$ |  |  |
| Dimensions (Wx $\mathrm{L} \times \mathrm{D}$ ) |  | $285 \times 225 \times 60 \mathrm{~mm}$ | $385 \times 225 \times 60 \mathrm{~mm}$ |  |
| Weight |  | 950 g | 1180g | 1200g |

## Cascade 5

## $8,12,16,24,32$ outputs

Cascade multiswitch range for 1 Satellite position with 5 inputs and 5 trunk outputs, suitable for distributing satellite and terrestrial signals in small to large sized systems. Available with 8 to 32 subscriber outputs and powered by the TMS PSU external power supply either directly or via the SAT trunk lines. The TMS 5 C series offers excellent performance and flexibility, with a compact design for installations even in confined spaces.


| Feature | EU version | TMS 5x8 C | TMS 5x12 C | TMS 5x16 C | TMS 5x24 C | TMS 5x32 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Art. no. |  | 318613 | 318614 | 318615 | 318616 | 318617 |
| Frequency range TER | Active / Passive (via switch) | $47-862 \mathrm{MHz} / 5-862 \mathrm{MHz}$ |  |  |  |  |
| Frequency range SAT |  | $950-2200 \mathrm{MHz}$ |  |  |  |  |
| Inputs SAT + TER (F-type connectors) |  | 5 |  |  |  |  |
| Subscriber Outputs (F-type connectors) |  | 8 | 12 | 16 | 24 | 32 |
| Trunk Loss | TER / SAT | $3 \pm 1 \mathrm{~dB} / 4 \pm 1 \mathrm{~dB}$ | $4 \pm 1 \mathrm{~dB} / 4 \pm 1 \mathrm{~dB}$ |  | $5 \pm 1 \mathrm{~dB} / 4 \pm 1 \mathrm{~dB}$ |  |
| TER Tap loss | TER active / TER passive | $0 \pm 2 \mathrm{~dB} / 23 \pm 2 \mathrm{~dB}$ | $0 \pm 2 \mathrm{~dB} / 27 \pm 2 \mathrm{~dB}$ |  | $0 \pm 2 \mathrm{~dB} / 33 \pm 2 \mathrm{~dB}$ |  |
| SAT Tap gain with 5dB slope |  | $-2 \ldots+3 \pm 2 \mathrm{~dB}$ | $-3 . . .+2 \pm 2 \mathrm{~dB}$ |  | $-4 \ldots+1 \pm 2 \mathrm{~dB}$ |  |
| Isolation Trunk-Trunk | TER to SAT / SAT to TER / SAT to SAT | > 30dB |  |  |  |  |
| Isolation Tap | TER to SAT / SAT to TER | $>25 \mathrm{~dB} />30 \mathrm{~dB}$ |  |  |  |  |
|  | Cross polarisation H/V | 30 dB |  |  |  |  |
|  | Tap-Tap TER / Tap-Tap SAT | $25 \mathrm{~dB} / 30 \mathrm{~dB}$ |  |  |  |  |
| Max. input level | TER / SAT | $90 \mathrm{~dB} \mu \mathrm{~V} / 97 \mathrm{~dB} \mu \mathrm{~V}$ | 90dB $\mu \mathrm{V} / 98 \mathrm{~dB} \mathrm{\mu} \mathrm{~V}$ |  | 90dB $\mu \mathrm{V} / \mathrm{g9dB} \mu \mathrm{~V}$ |  |
| Max. output level | TER Active (IMA3 60dB) SAT (IMA ${ }^{3}$ 35dB) | $\text { 90dB } \mu \mathrm{V}$$100 \mathrm{~dB} \mu \mathrm{~V}$ |  |  |  |  |
| Return loss TER/SAT | Trunk input / Trunk output | $>10 \mathrm{~dB}$ |  |  |  |  |
|  | Tap output | 10dB |  |  |  |  |
| Switching commands |  | DiSEqC 1.0 / 2.0, 13V, 18V, 13V22KHz, 18V22KHz |  |  |  |  |
| Power consumption | Multiswitch power consumption @18V | 30 mA TER passive 200 mA TER active |  |  |  |  |
|  | Max. current to LNB | 3 A |  |  |  |  |
|  | Max. current from receiver | < 50 mA |  |  |  |  |
| Multiswitch operating voltage |  | 15-20V DC |  |  |  |  |
| DC support on trunk line |  | on all 4 polarities VL/VH/HL/HH - TER no DC pass |  |  |  |  |
| Trunk max. current pass per line |  | 2 A |  |  |  |  |
| DC injection max. current |  | 3 A |  |  |  |  |
| Operating temperature |  | $-20 . . .+55^{\circ} \mathrm{C}$ |  |  |  |  |
| Dimensions ( $W \times L \times D$ ) |  | $175 \times 255 \times 65 \mathrm{~mm}$ |  |  | $275 \times 255 \times 65 \mathrm{~mm}$ |  |
| Weight |  | 485 g | 535 g | 550 g | 765 g | 815 g |
| Feature | UK version | TMS 5x8 C EB | TMS $5 \times 12 \mathrm{CEB}$ | TMS $5 \times 16$ C EB | TMS $5 \times 24$ C EB | TMS $5 \times 32 \mathrm{CEB}$ |
| Art. no. |  | 318626 | 318627 | 318628 | 318629 | 318630 |

## Cascade 9

## $8,12,16,24,32$ outputs

Cascade multiswitch range for 2 Satellite positions with 9 inputs and 9 trunk outputs, suitable for distributing satellite and terrestrial signals in small to large sized systems. Available with 8 to 32 subscriber outputs and powered by the TMS PSU external power supply either directly or via the SAT trunk lines. The TMS 9 C series offers excellent performance and flexibility, with a compact design for installations even in confined spaces.


| Feature |
| :--- |
| Art. no. |
| Frequency range TER | Active / Passive (via switch)

## Cascade 13

## $8,12,16,24,32$ outputs

Cascade multiswitch range for 3 Satellite positions with 13 inputs and 13 trunk outputs, suitable for distributing satellite and terrestrial signals in small to large sized systems. Available with 8 to 32 subscriber outputs and powered by the TMS PSU external power supply either directly or via the SAT trunk lines. The TMS 13 C series offers excellent performance and flexibility, with a compact design for installations even in confined spaces.


| Feature |
| :--- |
| Art. no. |
| Frequency range TER |
| Frequency range SAT |
| Inputs SAT + TER (F-type connectors) |

## Cascade 17

## $8,12,16,24,32$ outputs

Cascade multiswitch range for 4 Satellite positions with 17 inputs and 17 trunk outputs, suitable for distributing satellite and terrestrial signals in small to large sized systems. Available with 8 to 32 subscriber outputs and powered by the TMS PSU external power supply either directly or via the SAT trunk lines. The TMS 17 C series offers excellent performance and flexibility, with a compact design for installations even in confined spaces.


| Feature |  | TMS 17x8 C | TMS 17x12 C | TMS 17x16 C | TMS 17x24 C | TMS 17x32 C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Art. no. |  | 318901 | 318902 | 318903 | 318904 | 318905 |
| Frequency range TER | Active / Passive (via switch) | $47-862 \mathrm{MHz} / 5-862 \mathrm{MHz}$ |  |  |  |  |
| Frequency range SAT |  | $950-2200 \mathrm{MHz}$ |  |  |  |  |
| Inputs SAT + TER (F-type connectors) |  | 17 |  |  |  |  |
| Subscriber Outputs (F-type connectors) |  | 8 | 12 | 16 | 24 | 32 |
| Trunk Loss | TER / SAT | $4 \pm 1 \mathrm{~dB} / 4 \pm 1 \mathrm{~dB}$ | $4.5 \pm 1 \mathrm{~dB} / 4 \pm 1 \mathrm{~dB}$ |  | $5 \pm 1 \mathrm{~dB} / 6 \pm 1 \mathrm{~dB}$ |  |
| TER Tap loss | TER active / TER passive | $2 \pm 2 \mathrm{~dB} / 23 \pm 2 \mathrm{~dB}$ | $0 \pm 2 \mathrm{~dB} / 27 \pm 2 \mathrm{~dB}$ |  | $0 \pm 2 \mathrm{~dB} / 33 \pm 2 \mathrm{~dB}$ |  |
| SAT Tap gain with 5dB slope |  | $-2 \ldots+3 \pm 2 \mathrm{~dB}$ | $-3 . . .+2 \pm 2 \mathrm{~dB}$ |  | $-4 . . .+1 \pm 2 \mathrm{~dB}$ |  |
| Isolation Trunk-Trunk | TER to SAT / SAT to TER / SAT to SAT | > 30 dB |  |  |  |  |
| Isolation Tap | TER to SAT / SAT to TER | $>25 \mathrm{~dB} />30 \mathrm{~dB}$ |  |  |  |  |
|  | Cross polarisation H/V | 30 dB |  |  |  |  |
|  | Tap-Tap TER / Tap-Tap SAT | $25 / 30 \mathrm{~dB}$ |  |  |  |  |
| Max. input level | TER / SAT | $90 \mathrm{~dB} \mathrm{\mu V} / 97 \mathrm{~dB} \mu \mathrm{~V}$ | 90dB $\mathrm{V} / \mathrm{/} \mathrm{98dB} \mathrm{\mu V}$ |  | $90 \mathrm{~dB} \mu \mathrm{~V} / 99 \mathrm{~dB} \mu \mathrm{~V}$ |  |
| Max. output level | TER Active (IMA ${ }^{3}$ 60dB) SAT (IMA ${ }^{3}$ 35dB) | $\begin{gathered} 90 \mathrm{~dB} \mu \mathrm{~V} \\ 100 \mathrm{~dB} \mu \mathrm{~V} \end{gathered}$ |  |  |  |  |
| Return loss TER/SAT | Trunk input / Trunk output | $>10 \mathrm{~dB}$ |  |  |  |  |
|  | Tap output | 10 dB |  |  |  |  |
| Switching commands |  | DiSEqC 1.0 / 2.0, 13V, 18V, $13 \mathrm{~V} 22 \mathrm{KHz}, 18 \mathrm{~V} 22 \mathrm{KHz}$ |  |  |  |  |
| Power consumption | Multiswitch power consumption @18V | 30mA TER passive 150mA TER active | 30mA TER passive 180 mA TER active |  | 30mA TER passive 200 mA TER active |  |
|  | Max. current to LNB | 3A |  |  |  |  |
|  | Max. current from receiver | < 50 mA |  |  |  |  |
| Multiswitch operating voltage |  | 15-20V DC |  |  |  |  |
| DC support on trunk line |  | on all 4 polarities VL/VH/HL/HH - TER no DC pass |  |  |  |  |
| Trunk max. current pass per line |  | 2A |  |  |  |  |
| DC injection max. current |  | 3A |  |  |  |  |
| Operating temperature |  | $-20 \ldots+55^{\circ} \mathrm{C}$ |  |  |  |  |
| Dimensions (W $\times L \times \mathrm{D}$ ) |  | $175 \times 255 \times 65 \mathrm{~mm}$ |  |  | $275 \times 255 \times 65 \mathrm{~mm}$ |  |
| Weight |  | 920 g | 990 g | 1005g | 1420 g | 1470g |

## Application examples

## Regional experts dedicated to your business

The following schematics from our regional support teams showcase how a TRIAX Multiswitch installation could be configured in various situations.

For your next installation, just contact your local TRIAX office for dedicated planning and project support.

Typical UK cascade IRS installation


Standalone installation


Large cascade installation


## T <br> TRIAX



## - AERIALS

## DISHES

## CABLES

## MULTISWITCHES

## AMPLIFIERS

## TAPS

## SPLITTERS

## OUTLETS

and much more

## From rooftop to outlet

TRIAX offers a complete range of equipment and accessories for every stage of your installation.
From aerials and dishes, to measuring instruments, outlets, cables and beyond - we make connectivity easy, ensuring you live up to your own customer promises.
Browse the full range at triax.com/products

## PSU

Our three Power Supply Units (1.2, 2 and 3A) deliver 18V DC to your cascade system.

Power can be inserted into any TRIAX cascade Multiswitch, Tap, Splitter or Amplifier.

Please consider the total power consumption of your cascade system when selecting which power supply to use.

## Spacer

As our products may be installed in tight spaces, optional spacers are available to run the cable under the product.

The installation is therefore tidier and more compact.


## TRIAX

## Amplifiers

Our wide range of amplifiers will compensate for the cable loss in your designed multiswitch systems.

TMSA 5 amplifiers are available as Launch and Line Amplifiers and can be powered directly via their DC input port, or line powered via all Sat lines. UK variants are equipped with earth bars.
TMSA 9, 13 and 17 Line Amplifiers can be powered directly via their DC input, or line powered via any of their Sat ports.


| Feature | Amplifier - EU version | TMSA 5 LINE AMP | TMSA 5 <br> LAUNCH AMP | $\text { TMSA } 9$ LINE AMP | TMSA 13 LINE AMP | TMSA 17 LINE AMP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Art. no. |  | 318640 | 318641 | 318727 | 318815 | 318915 |
| Frequency range | TER passive | $5-862 \mathrm{MHz}$ |  |  |  |  |
|  | TER active | 47-694 MHz / 47-862 MHz via 2 position switch |  |  |  |  |
|  | SAT | $950-2200 \mathrm{MHz}$ |  |  |  |  |
| Inputs SAT + TER (F-type connectors) |  | 5 |  | 9 | 13 | 17 |
| Outputs SAT + TER (F-type connectors) |  | 5 |  | 9 | 13 | 17 |
| Gain | TER active | $20 \pm 2 \mathrm{~dB}$ | $30 \pm 2 \mathrm{~dB}$ | $17 \pm 2 \mathrm{~dB}$ | $15 \pm 2 \mathrm{~dB}$ |  |
|  | SAT | $20 \pm 2 \mathrm{~dB}$ | $30 \pm 2 \mathrm{~dB}$ | $18 . .23 \mathrm{~dB} \pm 2 \mathrm{~dB}$ 5 dB slope | $20 \pm 2 \mathrm{~dB}$ @ OdB slope or $16 . .22 \mathrm{~dB} \pm 2 \mathrm{~dB} @ 6 \mathrm{~dB}$ slope |  |
| Insertion loss | TER passive | 5 dB |  |  |  |  |
| Gain control | TER active | 0...15dB |  |  | 0...10dB |  |
|  | SAT | 0...15dB |  |  | 0...10dB |  |
| Slope control | TER active | 0...10dB | 0...15dB | 0...15dB | $0 . . .10 \mathrm{~dB}$ |  |
|  | SAT | $\begin{gathered} 5 \pm 2 \mathrm{~dB} \text { fixed } \\ \text { slope } \end{gathered}$ | $0 . . .10 \mathrm{~dB}$ | $\begin{gathered} 5 \pm 2 \mathrm{~dB} \text { fixed } \\ \text { slope } \end{gathered}$ | 0 dB or 6dB fixed slope |  |
| Isolation TER-SAT |  | >30dB |  |  |  |  |
| Return loss TER / SAT |  | $>10 \mathrm{~dB}$ |  |  |  |  |
| Max. Output level | TER Active (IMA ${ }^{3}$ 60dB) SAT (IMA ${ }^{3}$ 35dB) | $\begin{aligned} & 105 \mathrm{~dB} \mu \mathrm{~V} \\ & 112 \mathrm{~dB} \mu \mathrm{~V} \end{aligned}$ | $\begin{aligned} & 112 \mathrm{~dB} \mu \mathrm{~V} \\ & 118 \mathrm{~dB} \mu \mathrm{~V} \end{aligned}$ | $\begin{aligned} & 105 \mathrm{~dB} \mu \mathrm{~V} \\ & 110 \mathrm{~dB} \mu \mathrm{~V} \end{aligned}$ |  |  |
| Current consumption @18V DC |  | 230 mA max. | 500mA max. | 450mA max. | 600mA max. | 800mA max. |
| DC to LNB / Max. current to LNB |  | 18 V (15-20V) / 3A |  |  |  |  |
| External DC injection | DC IN (F) to SAT IN or SAT OUT | YES switchable |  |  |  |  |
|  | DC IN (F) to TER | No |  |  |  |  |
| External DC injection max. current |  | 3A |  |  |  |  |
| Max. current pass per SAT line |  | 2A |  |  |  |  |
| Operating temperature |  | $-20 . . .+55^{\circ} \mathrm{C}$ |  |  |  |  |
| Dimensions (WxLxD) |  | $175 \times 140 \times 65 \mathrm{~mm}$ |  |  | $175 \times 255 \times 65 \mathrm{~mm}$ |  |
| Weight |  | 550 g | 560 g | 590 g | 1040g | 1085 g |
| Feature | Amplifier - UK version | TMSA 5 LINE AMP EB | TMSA 5 LAUNCH AMP EB | - | - | - |
| Art. no. |  | 318645 | 318646 | - | - | - |

## Taps \& Splitters

Taps \& splitters are devices designed to be used in cascade systems to split the received signals to several trunk lines.

Tap attenuation can be selected using a rotary attenuator to adjust the tap output to the required signal level. Taps and Splitters are supplied with earth bars.

Power can be inserted on their DC input, or line powered via any of their Sat ports.


Feature
Splitter \& Taps
TMSS 5 SPLIT EB
TMST 5x1 TAP EB
TMST 5x2 TAP EB

| Art. no. |  | 318644 | 318642 | 318643 |
| :---: | :---: | :---: | :---: | :---: |
| Frequency range TER |  | $5-862 \mathrm{MHz}$ |  |  |
| Frequency range SAT |  | $950-2200 \mathrm{MHz}$ |  |  |
| Inputs SAT + TER (F-type connectors) |  | 5 |  |  |
| Outputs SAT + TER <br> (F-type connectors) | Splitter outputs | $2 \times 5$ (8 SAT + 2 TER $)$ |  |  |
|  | Line outputs | - | 5 (4 SAT + 1 TER) |  |
|  | Tap ouputs | - | 5 (4 SAT + 1 TER) | $2 \times 5$ (8 SAT + 2 TER) |
| Insertion loss | TER | $4 \pm 1 \mathrm{~dB}$ | $3 \pm 1 \mathrm{~dB}$ | $5 \pm 1 \mathrm{~dB}$ |
|  | SAT | $6 \pm 1 \mathrm{~dB}$ | $4 \pm 1 \mathrm{~dB}$ | $5 \pm 1 \mathrm{~dB}$ |
| Tap loss | TER / SAT | - | $\begin{gathered} \text { Rotary switch } 12 \ldots 30 \pm 2 \mathrm{~dB} \\ (12,15,20,25,30 \mathrm{~dB}) \\ \hline \end{gathered}$ |  |
| Isolation |  | $>30 \mathrm{~dB}$ |  |  |
| Return loss |  | $>10 \mathrm{~dB}$ |  |  |
| DC pass |  | SAT Inputs to SAT Outputs, <br> Bi-directional <br> TER no DC pass | SAT Inputs to SAT trunk and tap(s) Outputs, Bi-directional TER no DC pass |  |
| External DC injection max. current |  | 3A |  |  |
| Max. current pass per line |  | 2A |  |  |
| Current consumption @18V DC |  | 10 mA | 40 mA | 60 mA |
| Operating temperature |  | $-20 . .+55^{\circ} \mathrm{C}$ |  |  |
| Dimensions (W x L x D ) |  | $200 \times 140 \times 65 \mathrm{~mm}$ |  |  |
| Weight |  | 595 g | 605 g | 630 g |

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