## $2 \times 2$ DC-6GHz Switch

With Local \& Remote Control (via external alarm contacts)

This $2 \times 2$ switch operates over the


Front View of Model 23177-S5S5 DC to 6 GHz frequency range. It is designed to be controlled from the external alarm contacts of devices such as modulators. The unit can be controlled locally via front panel push buttons and remotely via an external alarm contact on the rear panel.

The shelf can be operated in manual or auto mode - selected by a push button on the front panel. A second push button on the front panel allows manual switching between the Main and Standby feeds in manual mode.

The three groups of LEDs show the shelf status. The AUTO and MANUAL LEDs show whether the external contacts (AUTO) are used or the right hand push button (MANUAL) is used to select switch status. The MAIN ONLINE and STANDBY ONLINE LEDs show which path is selected in both automatic and manual modes. The three LEDs on the right show power available (green LED) or individual failure of either of the dual redundant power supplies.


Rear View of Model 23177-S5S5

This particular unit is supplied with 50 ohm SMA connectors, but a range of connector types and impedances are available (model numbers will vary).


V 2.1 E\&OE

## Model Number: 23177-S5S5

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RF Engineering and Custom Build

Technical specifications and operating parameters

| RF Parameters |  |  |  |
| :---: | :---: | :---: | :---: |
| Capacity |  | $2 \times 2$ |  |
| Frequency Range |  | DC-6 GHz |  |
| Insertion Loss | DC-1GHz | $<0.10 \mathrm{~dB}$ |  |
|  | $1-2 \mathrm{GHz}$ | $<0.15 \mathrm{~dB}$ |  |
|  | $2-4 \mathrm{GHz}$ | $<0.20 \mathrm{~dB}$ |  |
|  | 4-6GHz | $<0.30 \mathrm{~dB}$ |  |
| Return Loss | DC-1GHz | $>26 \mathrm{~dB}$ |  |
|  | $1-2 \mathrm{GHz}$ | $>23 \mathrm{~dB}$ |  |
|  | $2-4 \mathrm{GHz}$ | $>20 \mathrm{~dB}$ |  |
|  | 4-6GHz | $>17 \mathrm{~dB}$ |  |
| Isolation | DC-1GHz | $>80 \mathrm{~dB}$ |  |
|  | $1-2 \mathrm{GHz}$ | $>80 \mathrm{~dB}$ |  |
|  | $2-4 \mathrm{GHz}$ | $>80 \mathrm{~dB}$ |  |
|  | 4-6GHz | $>70 \mathrm{~dB}$ |  |
| Switch Type |  | Coaxial relay transfer switch (failsafe) | 1,000,000 cycle minimum life; mounted on rear panel |


| System Control |  |  |
| :--- | :--- | :--- |
|  | Via front <br> Lanel push <br> buttons | Auto/Manual <br> mode; Main/ <br> Standby path |
| Remote Control | Via rear panel external alarm <br> contacts |  |
| Feeds |  <br> Standby | In OK condition <br> Main is connected <br>  <br> Standby to "Off <br> Line" |
| Operations |  <br> Auto | In manual mode <br> the unit is switched <br> via push buttons on <br> the front panel. In <br> auto mode it is <br> switched via <br> external alarm <br> contacts. Dry <br> change-over <br> alarm contacts <br> must be provided <br> by the modems |
| Display |  | Sront panel |


| Environmental |  |
| :--- | :--- |
| Operating temperature | 0 to $45^{\circ} \mathrm{C}$ |
| Location | Indoor use only |
| Storage temperature | $-20^{\circ} \mathrm{C}$ to $+75^{\circ} \mathrm{C}$ |
| Humidity | $85 \%$ non-condensing |
|  | Physical |
|  | SMA |
| Input Connector | $50 \Omega$ |
| Input Impedance | SMA |
| Output Connector | $50 \Omega$ |
| Output Impedance | 1 U high $\times 350 \mathrm{~mm}$ deep $\times 19^{\prime \prime}$ |
| Dimensions | wide |
| Weight | 8 kg |
| Colour | White 00-E-55 semi-gloss |


| Power |  |
| :--- | :--- |
| AC Power | $85-260 \mathrm{Vac} 50 / 60 \mathrm{~Hz}$ |
| LNB Power | None |
| PSU | Dual redundant |
| Hot-swap PSU | No |


| Key Features |
| :--- |
| DC-6 GHz |
| Local \& Remote Control |
| Dual redundant power supplies |
| Manual \& Auto Operational Modes |

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