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## dCSS NevoSwitch 5 inputs - 12 outputs

### A multiswitch has never been so clever

Multiswitch equipped with 5 inputs (one passive terrestrial and the four polarities of one satellite), and 12 user outputs that are compliant with SCR I (EN50494), SCR II (EN 50607) and legacy mode, which makes it compatible with any new or existing set top boxes. Can be used as a terminal (star topology) or as a cascade by using a simple switch. Furthermore, the exclusive DCFLEX functionality provides full flexibility to the multiswitch by allowing the equipment to be powered from anywhere in the system. The installer is free to choose the powering method for the multiswitch, to better adapt to the requirements of any given scenario. The versatility is provided by several control switches, but essentially by the capacity of the multiswitch to be isolated from the cascade (in terms of current) or not.

This product is certified with the European IRS Certification Scheme mark, representing that it has passed the relevant test as set out in the latest EICS test specification, available from the DTG or CAI

#### Ref.714104

Art.Nr	MSU51216SKY
EAN13	8424450196274

## Highlights

- Up to 16 user bands each user output
- DCFLEX functionality, multiple powering options: From the power supply or from the cascade through the satellite inputs or outputs
- Easy to integrate in an existing system: By switching the SAT DC LINK to OFF with the power supply connected, the MSW is locally powered without adding nor taking power from the cascade
- Brings higher security to the set top boxes connected to the multiswitch, which are fully isolated from the power supply in the cascade

- The TERR.DC ON switch isolates or connects the power supply available from the cascade in the terrestrial branch. Can be useful for the feeding of a mast amplifier or a BOSS antenna, but also for the terrestrial branches of other MSW in the cascade
- Wide voltage range: Voltages from 10 V to 20 V make it compatible with most existing systems
- Eco mode: Isolated from the cascade, the multiswitch can reduce power consumption down to zero, when the set top boxes are disconnected and the terrestrial passive
- Equipped with the TForce technology, the terrestrial output level is automatically adjusted to the optimal level
- European design, quality, and manufacturing

## Main features

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- Very compact
- Made of zamak
- Input and output colour identification
- Compatible with conventional multiswitches in the NevoSwitch series, and with other IRS systems
- Versatile: Cascade and independent configurations in a single reference (by pushing a switch)

## Discover

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### What is dCSS technology?

dCSS technology is the evolution of the SCR technology, which characteristics are described below:

The SCR technology (Satellite Channel Router) allows full distribution of one or several satellite signals to multiple users over a single coaxial cable.

The relevant aspect here is the suppression of the multiple cables required to support the new reception devices; this is achieved by means of a static or dynamic user band assignment and the use of DiseQc commands for satellite signal tuning.

A historical note: the SCR standard (EN50494) was defined in 2007. Based on the analogue concept, this technology considered the use of up to 8 user bands (User Bands) in the satellite IF band (950 MHz-2150 MHz). Each band is assigned a user tuner, and on each any input band and polarity can be selected using frequency processing.

Later, the dCSS technology (Digital Channel Stacking Switch), based on the EN50607 standard, introduces significant improvements, such as the increase in the number of satellites to be distributed, or the possibility to use 32 user bands in a single cable, which is almost equivalent to occupying the whole satellite band. Furthermore, the dCSS technology is backwards compatible with SCR.

The dCSS technology can be used in multiple scenarios (individual and communal distribution), and in dynamic or static

operation modes. The latter is the most flexible and inexpensive alternative to the headends with intermediate frequency processing that came along with early analogue and digital satellite distributions.

Likewise, the dCSS technology can be combined with optical fibre, which significantly extends the reach of the satellite distribution.

In short, the dCSS Technology is quite a step forward in the distribution of satellite signals over a single coaxial cable, and it will make for the mass introduction of the new reception devices in homes; devices such as Home Gateways or PVR, the big bet of satellite operators in the short and medium terms.

## Technical specifications

Type		5x5x12	
<b>SAT IN</b>			
Frequency range	MHz	950 ... 2150	
Inputs / Outputs	No.	4	
Input level	dB $\mu$ V	67 ... 97	
Through losses	dB	4.5 ... 9	
Cross-polarity isolation	dB	> 25	
<b>DTT IN</b>			
Frequency range	MHz	47 ... 862	
Inputs	No.	1	
Input level	dB $\mu$ V	Passive	-
		Active	80 ... 100
Terrestrial Trunk power	V— / mA	11 - 20/500	
Through losses	dB	< 8	
<b>dCSS OUT</b>			
dCSS output ports	No.	12	
Output modes		Legacy / SCR I / II	
dCSS Channel Bandwidth	MHz	46	
dCSR User Bands		12 x 16	
dCSR standard		EN50494 / EN50607 / SKY UK	
Output level	dB $\mu$ V	84 $\pm$ 2	
<b>DTT OUT</b>			
Frequency range	MHz	47 ... 862	
Attenuation (passive)	dB	-	
Automatic gain range (active)	dB	10 ... 7 / 7 ... 4 / 4 ... 1	
Output level (Amp. active / two channels)	dB $\mu$ V	87 $\pm$ 3 (input 75-100dB $\mu$ V)	
<b>POWER</b>			
Overall DC Power options		PWR port / Trunk lines VL / VH / HH / HL	
Power supply voltage	V=	11 - 20	
Max. Power consumption (@12V) dCSS + Terr. Amp. + Auto load	mA	1875 + 150 + 25	
Max. Power consumption (@18V) dCSS + Terr. Amp. + Auto load	mA	1250 + 150 + 25	
DTT input supply current	mA	500	
User outmax. current (receiver power ON)	A	0.4	
IF Trunk 4 lines max current	A	3	

GENERAL		
Operating temperature range	°C	-5 ... +45
Protection level	IP	IP20