

# Compact Redundancy Switch 8:1 RSCC-8 with Switch Matrix ISM-8



The WORK Microwave Redundancy Switch RSCC-8 is a compact solution for an 8:1 redundancy system. It can be used for Upconverters and Downconverters. The system consists of the controller and an indoor switch matrix integrated in separate 19" 1 RU housing.

The system can be configured from the front panel or remotely via RS232, RS422/485, or TCP/IP over Ethernet.

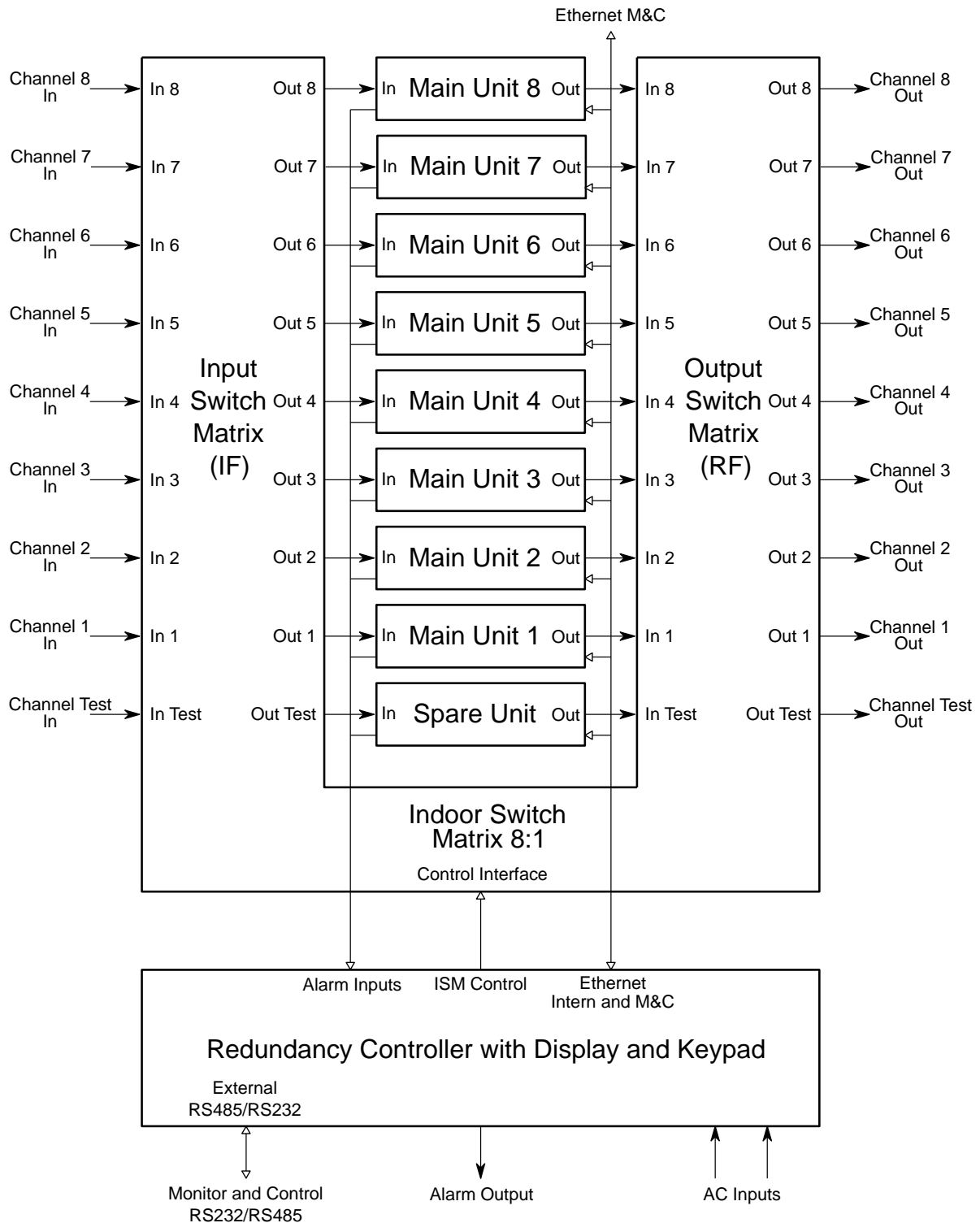
The switching system can be set in automatic mode, whereby an automatic switchover to the spare unit is performed upon detection of an alarm generated by the main unit. In addition, a manual switchover to the spare unit and back can be initiated.

Two power supplies and two AC input connectors within the unit guarantee high availability.

The Redundancy Switch RSCC-8 is also available with integrated uplink power control (Option UPC).

# Compact Redundancy Switch 8:1 RSCC-8

with Switch Matrix ISM-8



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Controller RSC8-ISM for Indoor Switch Matrix Parameters	
<b>Monitoring and Control Interface:</b>	Protocol: SNMP Connection: UDP over Ethernet (10 or 100 Mbps, auto sensing), connector RJ-45
	Protocol: HTTP (web browser interface) Connection: TCP/IP over Ethernet (10 or 100 Mbps, auto sensing), connector RJ-45
	Protocol: Multipoint packet format commands Connection: RS232 or RS422/RS485 (configurable), connector DSUB09 female or TCP/IP over Ethernet (10 or 100 Mbit/s, auto sensing), connector RJ-45
<b>User Interface:</b>	LCD or as option VFD with 2x 40 characters, 4 cursor keys, 2 function keys, Status LED's
<b>Combination connector:</b>	1x connector DSUB15 female, provided cable splits signals to:
<b>Unit Communication Interface:</b>	- RS485 (up to 8x connector DSUB09 male)
<b>Summary Alarm Interface:</b>	- Controller alarm out, two potential free contacts (DPDT, connector DSUB09 female)
<b>Interface Converter Unit Alarm:</b>	9x connector DSUB09 female
<b>Interface to Indoor Switch Matrix:</b>	Connector DSUB15 female
<b>Insertion loss compensation</b>	For each channel attenuation and equalization <sup>1)</sup> offsets can be set to compensate for influences of cable and relay differences in case of a replacement.
<b>Switching:</b>	Manual or Automatic
<b>Delay from unit alarm occurrence until IF/RF relay switching</b>	Typical 100 ms, max. 400 ms (depending on connected spare unit)
<b>Temperature Range:</b>	-30 °C ... 60 °C operating, -30 °C ... 80 °C storage The LC-Display is operational: -20 °C ... 60 °C.
<b>Relative Humidity:</b>	< 95 % non-condensing
<b>Mains Power Input:</b>	2x 100 ... 240 V AC nominal, 90... 264 V AC max, 50... 60 Hz, Redundant Power Supply, Hot swap
<b>Mains Power Consumption:</b>	Max: 25 VA / 7 W
<b>Mains Power Input Connector:</b>	2x IEC C14
<b>Mains Fuse:</b>	2 x 2 x 2.0 A time-lag fuse
<b>Dimension and Weight:</b>	483 x 44 x 470 mm <sup>3</sup> (WxHxD), 1 RU (19") approx. 5.5 kg

Indoor Switch Matrix ISM-8 Parameters			
<b>Interface to Indoor Controller:</b>	connector DSUB15 male		
<b>IF Connectors</b>	Impedance: 75 Ω Connector: BNC female		
<b>RF Connectors</b>	Impedance: 50 Ω Connector: SMA female		
<b>Monitor Connectors IF and RF only with option IFT / RFT</b>	Impedance: 50 Ω Connector: BNC female		
<b>Switch Type 75VHF, 40 ... 240 MHz</b>	Power handling max.: 10 dBm		
	Path:	normal	replaced
<b>Switch Type 50L, 1.8 ... 2.2 GHz</b>	Insertion loss (dB typ.):	4.5	5.0
	Isolation (dB typ.):	75	70
	Return Loss on Inputs (dB typ.):	21.9	14.4
	Return Loss on Outputs (dB typ.):	16.3	16.1
	Path:	normal	replaced
<b>Temperature Range:</b>	Insertion loss (dB typ.):	6.2	6.2
	Isolation (dB typ.):	70	74
	Input Return Loss (dB typ.):	13.3	12.7
	Output Return Loss (dB typ.):	20.1	17.0
	Path:	normal	replaced
<b>Relative Humidity:</b>	< 95 % non-condensing		
<b>Dimension and Weight:</b>	483 x 44 x 470 mm <sup>3</sup> (WxHxD), 1 RU (19") approx. 5 kg		

<sup>1)</sup> If supported by converters

Specifications are subject to change

# Compact Redundancy Switch 8:1 RSCC-8 with Switch Matrix ISM-8

## Order Information:

**RSCC-[Number of signal channels]-[IF Switch Type]-[RF Switch Type]-[Options]**

Compact Redundancy Switch consisting of controller and Indoor Switch Matrix  
Number of signal channels: 1 to 8

**RSC8-ISM-[VFD]**

Compact Redundancy Controller for Indoor Switch Matrix

**ISM-[Number of signal channels]-[IF Switch Type]-[RF Switch Type]**

Indoor Switch Matrix

Number of signal channels: 1 to 8

## Possible Options are:

**UPC** Uplink Power control included

**VFD** VF Display

**IFT** IF Test Output

**RFT** RF Test Output

## Examples:

**RSCC-8-75VHF-50L-VFD** Compact 8:1 Switch with VF Display and 75  $\Omega$  IF switch matrix for VHF band and 50  $\Omega$  RF switch matrix for L band

**RSCC-4-75VHF75VHF-50L** Compact 4:1 Switch with two 75  $\Omega$  IF switch matrices for VHF band and 50  $\Omega$  RF switch matrix for L band for 2-Channel-Converters