

# RSWM-4X8LR

Wideband Non-Blocking 4X8 Switching Matrix, 100 kHz ... 4000 MHz

# Features

- high dynamic
- high isolation
- non-reflective
- compact 19" 1U design
- graphical user interface

## Applications

- RF signal routing
- satellite ground segment IF routing
- infotainment test
- research & development (R&D)
- test and validation equipment



## At a Glance

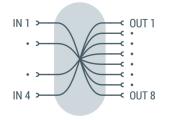
Modern RF signal routing systems need an unrestricted access to different signal sources like antennas or signal generators.

RSWM is an innovative and efficient solution in the laboratory, test or validation environment to give many test setups unrestricted access to a variety of signal sources. The wide frequency bandwidth up to more than 4 GHz covers all commercial broadcast services including GNSS.

The non-blocking architecture enables free access to all signal sources from any of its outputs. The same signal source can be used by multiple outputs simultaneously.

# Principal Block Diagram

The RSWM-4X8LR features four equivalent inputs and eight equivalent outputs interconnected via a non-blocking matrix. A single input can route to multiple outputs without any loss of signal transmission.



# Wear-free Solid-State Switches

The RSWM-4X8LR incorporates modern solid-state switching elements, guaranteeing rapid response to operational inputs and an unlimited number of switching cycles with minimal maintenance requirements.

## **High Channel Isolation**

To prevent unintentional signal coupling between different signal types, the device provides high channel isolation. Strong and weak signals in adjacent radio channels do not affect each other.

## **Versatile Control**

The RSWM-4X8LR is equipped with multiple control options for user convenience. It features a local MMI on the front panel, as well as LAN and USB interfaces. Depending on the customer's needs, the system can be managed using the intuitive web-based graphical user interface or through SCPI-based ASCII commands via its interface ports.

## **Synchronous Operation**

The RSWM-4X8LR offers two switching modes:

- Direct: every switching operation is executed after reception of the command.
- Synchronous: all switching commands are stored until a "SYNC" command executes the switching operation synchronously.

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# **External Triggering**

Similar to several other products from Becker Nachrichtentechnik GmbH, the RSWM-4X8LR includes a TRIGGER IO port. This physical interface enables the device to execute switching operations synchronously across multiple matrices, triggered by hardware signals.

# **RF Specification**

$\begin{array}{ c c c c c } Impedance & Z_{IV}Z_{OUT} & 50 & \Omega \\ number of inputs & NiN & 4 & & & & & & \\ number of outputs & Nour & 8 & & & & & \\ low frequency & f_{MNN} & 100 & 300 & KHz \\ high frequency & f_{MAX} & 4000 & & & MHz \\ gain & Sz1 & 4 & dB \\ input return loss & S_{11} & -13 & dB \\ output return loss & Sz2 & -17 & dB & f \leq 3 GHz \\ Sz2 & -14 & dB & f \leq 3 GHz \\ Sz2 & -14 & dB & f \leq 3 GHz \\ 1 dB compression & P_{1dB} & +5 & dBm & 500 kHz \leq f \leq 1 GHz \\ P_{1dB} & +44 & dBm & f > 3 GHz \\ \hline reverse isolation & S_{12} & -70 & dB \\ 3^{rd} order intercept & OIP3 & +20 & dBm & 500 kHz \leq f \leq 1 GHz \\ 3^{rd} order intercept & OIP3 & +20 & dBm & 500 kHz \leq f \leq 1 GHz \\ \hline reverse isolation & S_{12} & -70 & dB \\ 3^{rd} order intercept & OIP3 & +20 & dBm & f > 3 GHz \\ \hline noise figure & NF & 10 & dB & f \geq 5 MHz \\ channel isolation & S_{32} & -80 & dB & f \geq 5 MHz \\ output isolation & S_{12} & -35 & dB \\ GF & HT & HT & HT & HT & HT & HT \\ From the provement & P_{RF} & HT & 41 & HT & HT & 1 & HT \\ reverse isolation & S_{12} & -35 & dB \\ FF input power & P_{RF} & HT & 10 & dB & f \geq 5 MHz \\ channel isolation & S_{12} & -35 & dB \\ FF input power & P_{RF} & HT & M & HT & I & I & HT \\ FF connectors & X_{RF} & SMA female \\ FF oncentors & X_{RF} & SMA female \\ FT ingger input & X_{TRG} & BNC female \\ Frigger input & X_{TRG} & SNC female \\ Finger input & X_{TRG} & SNC female \\ Trigger offset & lo_{RISE} & 1.1 & \mus & 50\% trigger \rightarrow 50\% RF failing edge, note 2 \\ switch fialt time & traduk & 2 & \mus & 50\% trigger \rightarrow 50\% RF failing edge, note 2 \\ \end{array}$	Parameter	Symbol	Min.	Тур.	Max.	Unit	Condition
number of outputsNour8Mlow frequencyfmix100300kHzhigh frequencyfmax4000MHzgainS214dBinput return lossS11-13dBoutput return lossS22-17dBS22-14dBf $\leq$ 3 GHz1 dB compressionP1dB+5dBmP1dB+44dBm1 GHz < f $\leq$ 3 GHzreverse isolationS12-70dB3'd order interceptOIP3+20dBmoutput isolationS12-70dBsignarS12-70dBsignarNF10dBsignarS12-70dB1 dB compressionS12-70dB1 dB compressionS12-70 <td>Impedance</td> <td>ZIN/ZOUT</td> <td></td> <td>50</td> <td></td> <td>Ω</td> <td></td>	Impedance	ZIN/ZOUT		50		Ω	
$\begin{array}{ c c c c c c } low frequency & f_{MIN} & 4000 & 40 & MHz \\ \hline high frequency & f_{MAX} & 4000 & & MHz \\ \hline gain & S_{21} & 4 & dB \\ \hline input return loss & S_{21} & -13 & dB \\ output return loss & S_{22} & -17 & dB & f \leq 3  GHz \\ \hline S_{22} & 177 & dB & f \leq 3  GHz \\ \hline S_{22} & -14 & dB & f > 3  GHz \\ \hline S_{22} & -14 & dB & f > 3  GHz \\ \hline P_{1dB} & +5 & dBm & 500  kHz \leq f \leq 1  GHz \\ \hline P_{1dB} & -1 & dBm & f > 3  GHz \\ \hline P_{1dB} & -1 & dBm & f > 3  GHz \\ \hline P_{1dB} & -1 & dBm & f > 3  GHz \\ \hline S_{12} & -770 & dB \\ 3'' order intercept & OIP3 & +20 & dBm \\ \hline 3'' order intercept & OIP3 & +14 & I \\ \hline P_{1dB} & -1 & dBm & f > 3  GHz \\ \hline P_{1dB} & -1 & dBm & f > 3  GHz \\ \hline S_{12} & -770 & dB \\ \hline S_{12} & -770 & dB \\ \hline S_{12} & -35 & dB \\ \hline S_{12} & -35 & dB \\ \hline P_{13} & -10 & dB & f \leq 3  GHz \\ \hline P_{14} & -10 & dB & f \leq 3  GHz \\ \hline P_{14} & -10 & dB & f \leq 3  GHz \\ \hline P_{14} & -10 & dB & f \leq 3  GHz \\ \hline S_{14} & -10 & dB & f \leq 3  GHz \\ \hline S_{14} & -10 & dB & f \leq 3  GHz \\ \hline S_{14} & -10 & dB & f \leq 3  GHz \\ \hline S_{14} & -10 & dB & f \leq 3  GHz \\ \hline S_{14} & -10 & -10 & dB & f \leq 3  GHz \\ \hline S_{14} & -10 & -10 & dB & f \leq 3  GHz \\ \hline S_{14} & -10 & -10 & dB & f \leq 3  GHz \\ \hline S_{14} & -10 & -10 & dB & f \leq 3  GHz \\ \hline S_{14} & -10 & -10 & dB & f \leq 3  GHz \\ \hline S_{14} & -10 & -10 & dB & f \leq 3  GHz \\ \hline S_{14} & -10 & -10 & dB & f \leq 3  GHz \\ \hline S_{14} & -10 & -10 & dB & f \leq 3  GHz \\ \hline S_{14} & -10 & -10 & dB & -10 \\ \hline S_{14} & -10 & -10 & dB & -10 \\ \hline S_{14} & -10 & -10 & -10 & -10 \\ \hline S_{14} & -10 & -10 & -10 & -10 \\ \hline S_{14} & -10 & -10 & -10 & -10 \\ \hline S_{14} & -10 & -10 & -10 \\ \hline S_{14} & -10 & -10 & -10 \\ \hline S_{14} & -10 & -10 & -10 \\ \hline S_{14} & -10 & -10 & -10 \\ \hline S_{14} & -10 & -10 & -10 \\ \hline S_{14} & -10 & -10 & -10 \\ \hline S_{14} & -10 & -10 \\ \hline S_{14}$	number of inputs	NIN		4			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	number of outputs	Νουτ		8			
gainS214dBinput return lossS11-13dBoutput return lossS22-17dBS22-14dBf ≤ 3 GHz1 dB compressionP1dB+5dBmP1dB+4dBm500 kHz ≤ f ≤ 1 GHzP1dB-1dBmf > 3 GHzreverse isolationS12-70dB3rd order interceptOIP3+20dBmotder interceptOIP3+20dBmroise figureNF10dBreverse isolationS12-70dB3rd order interceptOIP3+20dBm500 kHz ≤ f ≤ 1 GHz1 GHz < f ≤ 3 GHz	low frequency	fмin		100	300	kHz	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	high frequency	<b>f</b> MAX	4000			MHz	
output return loss $S_{22}$ $-17$ dB $f \le 3 \text{ GHz}$ $S_{22}$ $-14$ dB $f > 3 \text{ GHz}$ 1 dB compression $P_{1dB}$ $+5$ dBm $500 \text{ kHz} \le f \le 1 \text{ GHz}$ $P_{1dB}$ $+4$ dBm $1 \text{ GHz} < f \le 3 \text{ GHz}$ $P_{1dB}$ $-1$ dBm $f > 3 \text{ GHz}$ reverse isolation $S_{12}$ $-70$ dB $3^{rd}$ order interceptOIP3 $+20$ dBm $500 \text{ kHz} \le f \le 1 \text{ GHz}$ $3^{rd}$ order interceptOIP3 $+14$ $1 \text{ GHz} < f \le 3 \text{ GHz}$ noise figureNF10dB $f \ge 3 \text{ GHz}$ noise figureNF10dB $f \le 3 \text{ GHz}$ output isolation $S_{32}$ $-80$ dB $f \le 3 \text{ GHz}$ output isolation $S_{12}$ $-35$ dBRF input powerPRF $10$ dB $f \le 3 \text{ GHz}$ RF connectorsXRF $SMA \text{ female}$ $sin anage$ RF connectorsXRF $SMA \text{ female}$ $sin anage$ trigger inputXTRIG $BNC \text{ female}$ internal 1 k $\Omega$ pull up, active hightrigger offset $t_0_{-RAL}$ $6.5$ $\mu s$ $50\%$ trigger $\rightarrow 50\%$ RF falling edge, note 2switch rise timetrues1 $\mu s$ $10\% \rightarrow 90\%$ RF	gain	S <sub>21</sub>		4		dB	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	input return loss	S <sub>11</sub>		-13		dB	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	output return loss	S <sub>22</sub>		-17		dB	f ≤ 3 GHz
$ \begin{array}{ c c c c } \hline P_{1dB} &   & +4 &   & dBm & 1 \ GHz < f \le 3 \ GHz \\ \hline P_{1dB} &   & -1 &   & dBm & f > 3 \ GHz \\ \hline P_{1dB} &   & -70 &   & dB \\ \hline P_{1dB} &   & -70 &   & -70 \\ \hline P_{1dB} &   & -70 &   & -70 \\ \hline P_{1dB} &   & -70 &   & -70 \\ \hline P_{1dB} &   & -70 &   & -70 \\ \hline P_{1dB} &   & -70 &   & -70 \\ \hline P_{1dB} &   & -70 &   & -70 \\ \hline P_{1dB} &   & -70 &   & -70 \\ \hline P_{1dB} &   & -70 &   & -70 \\ \hline P_{1dB} &   & -70 &   & -70 \\ \hline P_{1dB} &   & -70 &   & -70 \\ \hline P_{1dB} &   & -70 &   & -70 \\ \hline P_{1dB} &   & -70 &   & & -70 \\ \hline P_{1dB} &   & -70 &   & -70 \\ \hline P_{1dB} &   & -70 &   & -70 \\ \hline P_{1dB} &   & -70 &   & -70 \\ \hline P_{1dB} &   & -70 &   & -70 \\ \hline P_{1dB} &   & -70 &   & -70 \\ \hline P_{1dB} &   & -70 &   & -70 \\ \hline P_{1dB} &   & -70 &   & -70 \\ \hline P_{1dB} &   & -70 &   & -70 \\ \hline P_{1dB} &   & -$		S <sub>22</sub>		-14		dB	f > 3 GHz
$\begin{array}{ c c c c c } \hline P_{1dB} &   & -1 &   & dBm & f > 3 \ GHz \\ \hline reverse isolation & S_{12} &   & -70 &   & dB \\ \hline 3^{rd} \ order intercept & OIP3 & +20 &   & dBm & 500 \ kHz \le f \le 1 \ GHz \\ \hline & & +20 &   & dBm & 500 \ kHz \le f \le 3 \ GHz \\ \hline & & +14 &   &   &   \ GHz < f \le 3 \ GHz \\ \hline & & +8 &   & f > 3 \ GHz \\ \hline & & +8 &   & f > 3 \ GHz \\ \hline & & & +8 &   & f > 3 \ GHz \\ \hline & & & +8 &   & f > 3 \ GHz \\ \hline & & & & +8 &   & f > 3 \ GHz \\ \hline & & & & & +8 &   & f > 3 \ GHz \\ \hline & & & & & & & & & & & & & & & \\ \hline & & & &$	1 dB compression	P <sub>1dB</sub>		+5		dBm	500 kHz ≤ f ≤ 1 GHz
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		P <sub>1dB</sub>		+4		dBm	1 GHz < f ≤ 3 GHz
$3^{rd}$ order interceptOIP3+20dBm $500 \text{ kHz} \le f \le 1 \text{ GHz}$ $i$ $i$ $i$ $i$ $i$ $i$ $i$ $GHz < f \le 3 \text{ GHz}$ noise figureNF $i$ $i$ $dB$ $f \ge 3 \text{ GHz}$ channel isolation $S_{32}$ $-80$ $dB$ $f \le 3 \text{ GHz}$ output isolation $S_{12}$ $-35$ $dB$ $f \le 3 \text{ GHz}$ output isolation $S_{12}$ $-35$ $dB$ $f \le 3 \text{ GHz}$ output isolation $S_{12}$ $-35$ $dB$ $f \le 3 \text{ GHz}$ output isolation $S_{12}$ $-35$ $dB$ $f \le 3 \text{ GHz}$ output isolation $S_{12}$ $-35$ $dB$ $f \le 3 \text{ GHz}$ output isolation $S_{12}$ $-35$ $dB$ $f \le 3 \text{ GHz}$ output isolation $S_{12}$ $-35$ $dB$ $f \le 3 \text{ GHz}$ output isolation $S_{12}$ $-35$ $dB$ $f \le 3 \text{ GHz}$ RF input power $P_{RF}$ $I = 15$ $V$ $a$ RF connectors $R_{FR}$ $4.7$ $k\Omega$ $a$ RF connectors $X_{RF}$ $SMA$ femaleinternal 1 k $\Omega$ pull up, active hightrigger input $X_{TRIG}$ $TTL (0 / 5 V)$ internal 1 k $\Omega$ pull up, active hightrigger offset $t_0$ _RISE $6.5$ $\mu$ s $50\%$ trigger $\rightarrow 50\%$ RF falling edge, note 2switch rise timet_{RISE}1 $\mu$ s $10\% \rightarrow 90\%$ RF		P <sub>1dB</sub>		-1		dBm	f > 3 GHz
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	reverse isolation	S <sub>12</sub>		-70		dB	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	3 <sup>rd</sup> order intercept	OIP3		+20		dBm	500 kHz ≤ f ≤ 1 GHz
$\begin{array}{c c c c c c c c c c c c c c c c c c c $				+14			1 GHz < f ≤ 3 GHz
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $				+8			f > 3 GHz
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	noise figure	NF		10		dB	f≥5 MHz
$\begin{array}{ c c c c c } RF \mbox{ input power } & P_{RF} &   &   & +15 & dBm & \mbox{ no damage } \\ maximum DC \mbox{ voltage } & U_{DC} &   & 15 & V & \mbox{ all RF ports } \\ ESD \mbox{ discharge resistor } & R_{ESD} & 4.7 & & \mbox{ k}\Omega & \mbox{ all RF ports } \\ RF \mbox{ connectors } & X_{RF} & SMA \mbox{ female } \\ trigger \mbox{ input } & X_{TRIG} & BNC \mbox{ female } \\ trigger \mbox{ level } & U_{TRIG} & TTL (0 / 5 \ V) & \mbox{ internal 1 k}\Omega \mbox{ pull up, active high } \\ trigger \mbox{ offset } & t_{O\_FALL} & 6.5 & \mbox{ level } \\ t_{O\_RISE} & t_{O\_RISE} & 1.1 & \mbox{ less } & \mbox{ switch rise time } \\ trigger \mbox{ level } & t_{RISE} & 1 & \mbox{ level } \\ \end{array}$	channel isolation	S <sub>32</sub>		-80		dB	f ≤ 3 GHz
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	output isolation	S <sub>12</sub>		-35		dB	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	RF input power	PRF			+15	dBm	no damage
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	maximum DC voltage	UDC			15	V	all RF ports
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	ESD discharge resistor	Resd		4.7		kΩ	all RF ports
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	RF connectors	XRF	S	SMA fema	le		
$ \begin{array}{c c} \mbox{trigger offset} & to\_FALL & co\_FALL & co$	trigger input	XTRIG		BNC fe	emale		internal 1 k $\Omega$ pull up, active high
to_RISEto_RISE1.1 $\mu$ s50% trigger $\rightarrow$ 50% RF rising edge, note 2switch rise timetRISE1 $\mu$ s10% $\rightarrow$ 90% RF	trigger level	UTRIG		TTL (0	/ 5 V)		
switch rise timetrise1 $\mu$ s10% $\rightarrow$ 90% RF	trigger offset	to_fall		6.5		μs	
		to_RISE		1.1		μs	
switch fall time $t_{FALL}$ 2 $\mu s$ 90% $\rightarrow$ 10% RF	switch rise time	tRISE		1		μs	10% → 90% RF
						μs	

Note 1: tested at Pout 2 x -10dBm; ∆f = 2 MHz

Note 2: capacitive load at 'TRIGGER IO' Port ≤ 100pF, trigger mode "OUT"

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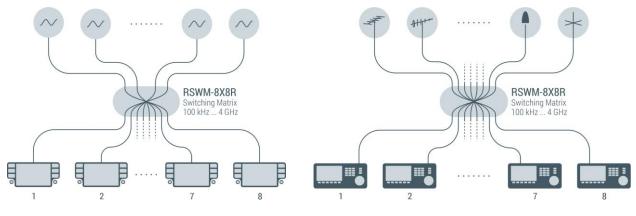


# **Common Specification**

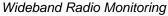
Parameter	Symbol	Min.	Тур.	Max.	Unit	Condition		
power supply	U <sub>AC</sub>	90	230	260	V	50 / 60 Hz AC		
power consumption	PAC		100		W			
power socket	X <sub>AC</sub>	IEC	-60320 C	:14		country specific mains cable		
remote ports	LAN	10/100	BaseT	TC	P/IP	RJ45 on rear side		
	USB		2.0 (high	speed)		USB type B		
Dimensions and weigh	nt			. ,				
dimensions	WxHxD	approx. 482 x 44 x 455			mm	19" 1U, without connectors and handles		
weight	m		5		kg			
Environment condition	າຣ							
operating temp. range	To	+5		+45	°C			
storage temp. range	Ts	-40		+70	°C			
Product conformity								
Electromagnetic compatibility	EU: in line	e with EM	C directiv	e (2014/3	30/EC)	applied harmonized standards: EN61326-2-1, (for use in control and laboratory environments), EN55035, EN55032, EN61000-3-2, EN61000-3-3		
Electrical safety	EU: ir	i line with (201	low volta 4/35/EC)	•	ive	applied harmonized standard: EN 61010-1		
Ordering information	RSWM-4	X8LR	2	103.4452	2.1			

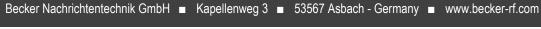
# **Application Examples**

The RSWM-4X8LR is versatile, catering to radio monitoring applications and research and development test environments. With the RSWM products, customers can easily route input signals to any device output. As illustrated, the input can be connected to various signal sources or antennas:



Car Infotainment Test with different GNSS Position Data





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# **Graphical User Interface**

The graphical user interface (GUI) enables users to define custom labels tailored to their specific applications, making input selection more contextually meaningful.

#### **Matrix Setup Interface**

🌣 Matrix	Setup					
Labels						
Input Labels				Output Labels		
X11	Input No 1			X21	Output No 1	
X12	Input No 2			X22	Output No 2	
X13	Input No 3			X23	Output No 3	
X14	Input No 4			X24	Output No 4	
X15	Input No 5			X25	Output No 5	
X16	Input No 6			X26	Output No 6	
X17	Input No 7			X27	Output No 7	
X18	Input No 8			X28	Output No 8	
Power Up State						
i onci op state	,					
Matrix state a	fter powering up the o	levice			PRESET SHUTDOWN	

# **Matrix Control Interface**

RSWM-NX8	Switching Matrix	🔹 Setup	😲 Diagnostic <del>-</del>	🗲 Tools -	System <del>-</del>					<b>Q</b> Use
	🛪 Matrix Con	trol					ତ Save Preset	C Restore Preset	() All OFF	
	Output No 1	OFF - I	No Input		~	Output No 5 x25	OFF - No Input		~	
	Output No 2	OFF - I	No Input		~	Output No 6 X26	OFF - No Input		*	
	Output No 3 X23	OFF - I	No Input		~	Output No 7 X27	OFF - No Input		*	
	Output No 4 X24	OFF - I	No Input		~	Output No 8 X28	OFF - No Input		~	

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## **Appearances**

**Front View** 



#### **Rear View**

Variant with AC-Supply



Variant with DC-Supply

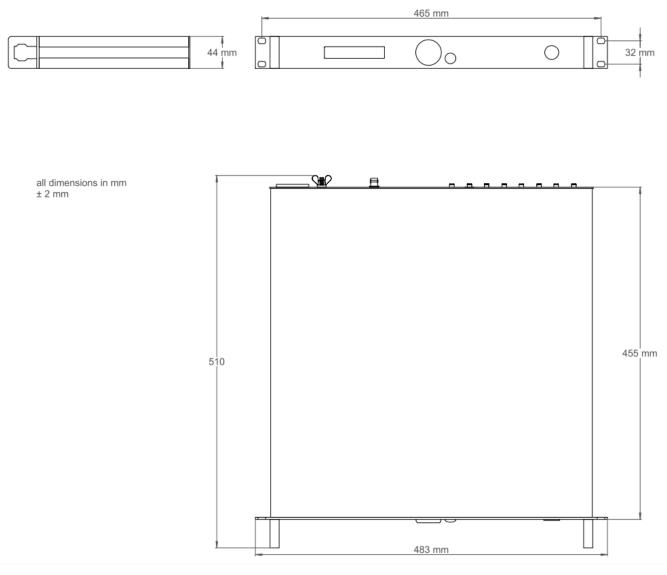
x21 ↔ () x11 ↔ ()	X22 ↔ () X12 ↔ () ()	X23 ↔ ⓒ X13 &	X24 ↔ () X14 () () () () () () () () () ()	x25 ↔ () x15 ↔ () ()	x26 ↔ x16 ↔ x16 ↔	x27 ↔ ⓒ x17 ↔ ⓒ	X28 ↔ () X18 ↔ () ()	+3 dB typ: Z = 50 Ω +10 dBm max.	X71 TRIGGER IO X81 USB LAN	

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# Dimensions



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# **Related Products**

Product	P/N	Description
RSWM-4X4LR	1205.4402.X	Wideband Non-Blocking 4X4 Switching Matrix
		100 kHz 4000 MHz
		LAN remote interface with SNMPv2 trap function
RSWM-4X8LR	2103.4452.X	Wideband Non-Blocking 4X8 Switching Matrix
		100 kHz 4000 MHz
		LAN remote interface with SNMPv2 trap function
RSWM-8X8LR	2103.4552.X	Wideband Non-Blocking 8X8 Switching Matrix
		100 kHz 4000 MHz
	4005 4400 V	LAN remote interface with SNMPv2 trap function
RSWM-4X4R	1205.4102.X	High-Dynamic Non-Blocking 4X4 Switching Matrix
		LAN remote interface with SNMPv2 trap function
RSWM-4X8R	2103.4302.X	High-Dynamic Non-Blocking 4X8 Switching Matrix
11.00000-47.011	2103.4302.7	100 kHz 4000 MHz
		LAN remote interface with SNMPv2 trap function
RSWM-8X8R	2103.4502.X	High-Dynamic Non-Blocking 8X8 Switching Matrix
		100 kHz 4000 MHz
		LAN remote interface with SNMPv2 trap function
RSWM-4X4ER	1205.4202.X	Extremely Wideband Non-Blocking 4X4 Switching Matrix
		20 8000 MHz
		LAN remote interface with SNMPv2 trap function
RSWM-4X8ER	2103.4402.X	Extremely Wideband Non-Blocking 4X8 Switching Matrix
		20 8000 MHz
		LAN remote interface with SNMPv2 trap function
RSWM-8X8ER	2103.4602.X	Extremely Wideband Non-Blocking 8X8 Switching Matrix
		20 8000 MHz
	4005 4500 V	LAN remote interface with SNMPv2 trap function
BSWM-4X4ER	1205.4502.X	4X4 Bidirectional Blocking Wideband Switching Matrix 100 kHz 8000 MHz
		LAN remote interface with SNMPv2 trap function
BSWM-4X8ER	2103.4702.X	4X8 Bidirectional Blocking Wideband Switching Matrix
DOWNERADEN	2103.4702.7	100 kHz 8000 MHz
		LAN remote interface with SNMPv2 trap function
BSWM-8X8ER	2103.4802.X	8X8 Bidirectional Blocking Wideband Switching Matrix
		100 kHz 8000 MHz
		LAN remote interface with SNMPv2 trap function

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