



Front



Back

ASM 4221

Signal distribution

MF

HF

0.5 MHz – 30 MHz

The ASM 4221 is an antenna switch matrix covering the frequency range from 1 - 30 MHz. Up to 32 inputs can be dynamically connected to up to 32 outputs. The modular architecture supports a customized number of in- and outputs so smaller matrices than 32x32, or even different sub-matrices in one device can be configured. Several matrices can be combined to build larger matrices.

TECHNICAL HIGHLIGHTS

- Antenna switch matrix with up to 32 in- and outputs
- non-blocking switching
- modular, scalable architecture
- cards can be exchange during operation
- high linearity and low noise figure (<7 dB)

CUSTOMER ADVANTAGES

- configurations adapted to customer and system needs
- design allows multistage complex matrices with high MTBF and low MTTR Figures
- interception points OIP2 ≥ 90 dBm and OIP3 ≥ 45 dBm are prerequisites for multistage operation
- high sensitivity and low intermodulation lead to clear signal monitoring with less distortion and high SNR

Find out about our other products:

DIRECTION-FINDING
RECEIVER

MONITORING
RECEIVER

DIRECTION-FINDING
ANTENNA

RADIO MONITORING
ANTENNA

SIGNAL
DISTRIBUTION

CONTROL &
ANALYSIS SOFTWARE

ASM 4221	
Frequency range	1 MHz – 30 MHz (VLF from 10 kHz to 1,500 kHz on request)
Nominal input impedance	50 Ω
Number of inputs	up to 32
Number of outputs	up to 32
Noise figure	≤ 7 dB
IP2 (output)/IP3 (output)	≥ 90 dBm/ ≥ 45 dBm
Isolation input – input	≥ 50 dB (adjacent channels), ≥ 70 dB (not adjacent channels)
Isolation input – output (off)	≥ 50 dB (adjacent channels), ≥ 70 dB (not adjacent channels)
Isolation output – input	≥ 50 dB
Isolation output – output	≥ 33 dB (adjacent channels), ≥ 40 dB (not adjacent channels)
VSWR	$\leq 1.5 : 1$
Gain	0.5 dB \pm 1.5 dB (more than 16 inputs)
Relay switching time	typ. 3 ms
Number of relay switch cycles	typ. 100,000,000
Inputs and outputs	QMA
Operating voltage	230 VAC (optional 110 VAC)
Operating current	3 A (with maximum number of in- and outputs)
Power consumption	460 W (with maximum number of in- and outputs)
Interface	LAN 10Base-T (TCP/IP)
Service	EIA-232/RS-232 (DE-9)
Operating temperature	0° C to +40° C
Storage temperature	-10° C to +50° C
Width	19" (482.6 mm)
Height	4 RU (178 mm)
Depth	620 mm (required rack depth ≥ 900 mm)
Weight	37 kg (with maximum number of in- and outputs)