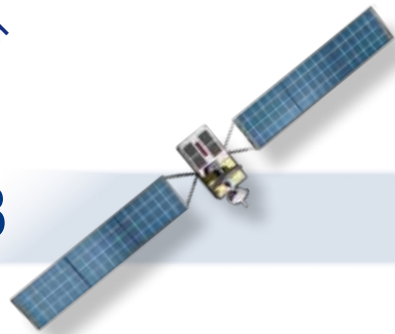




4 x 8 RF SAT MATRIX MULTISWITCH with LOOP THROUGH PATH and Redundant PSU

Rover
SAT-MATRIX
MULTISWITCH

mod. **RSM-48**



MAIN FEATURES

- 4 SATELLITE INPUTS (HL, VL, HH & VH) - Voltage & Tone LNB Powering
- LOOP-THROUGH PATH per Polarity providing LNB Powering Transfer
- LOOP-THROUGH OUTPUT per Satellite Input providing Adjustable Gain
- 8 SATELLITE SUBSCRIBER OUTPUTS – Input Selection via Voltage & Tone
- REDUNDANT HOT-SWAP POWER SUPPLIES
- ESD PROTECTION AT ALL RF IN/OUT

**INNOVATIVE
PERFORMANCE**

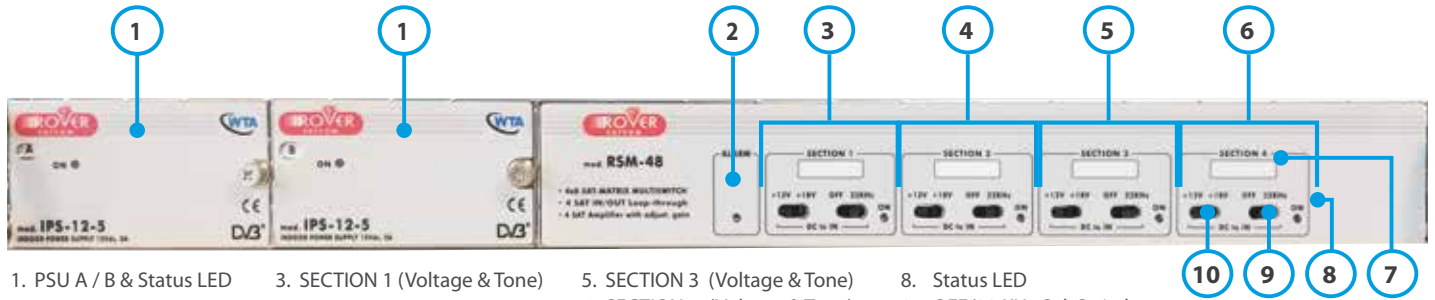
for: SYSTEM INTEGRATOR,
TELEPORT BROADCASTER,
CABLE NETWORK, GOVERNMENT
& MILITARY COMMUNICATIONS



1972 > 2022 >>

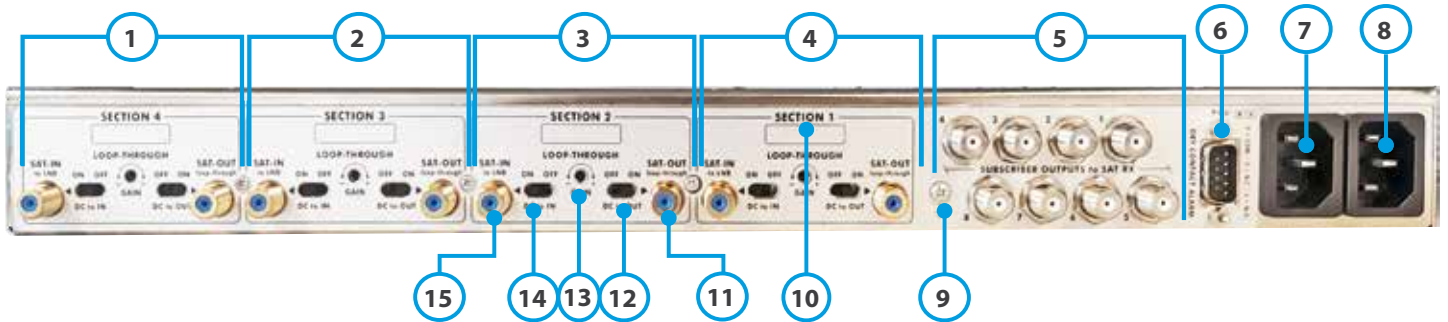
50 YEARS OF TECHNOLOGY INNOVATION

FRONT PANEL VIEW



- | | | | |
|---------------------------|-------------------------------|-------------------------------|---------------------------|
| 1. PSU A / B & Status LED | 3. SECTION 1 (Voltage & Tone) | 5. SECTION 3 (Voltage & Tone) | 8. Status LED |
| 2. General Alarm LED | 4. SECTION 2 (Voltage & Tone) | 6. SECTION 4 (Voltage & Tone) | 9. OFF/22 KHz Sel. Switch |
| | | 7. Label to fill | 10. +13V/+18V Sel. Switch |

REAR PANEL VIEW



- | | | |
|--|-------------------------------|---|
| 1. Section 4 | 6. Dry Contact Alarms, Sub-D9 | 11. Loop-Through Output, F(f) |
| 2. Section 3 | 7. AC Main (B) | 12. DC Pow. Switch to Loop-Through Transfer |
| 3. Section 2 | 8. AC Main (A) | 13. Loop-Through Gain Adjustment |
| 4. Section 1 | 9. Earth Bolt | 14. LNB Powering Switch (ON-OFF) |
| 5. N. 8 Satellite Subscriber RX Outputs F(f) | 10. Label to fill | 15. Satellite Input, F(f) |

TECHNICAL SPECIFICATIONS

GENERAL DESCRIPTION:

- 4 Satellite Inputs (HL, VL, HH & VH) with LNB Voltage & Tone
- 8 Subscriber RX Outputs, Input Selection via Voltage & Tone
- Loop-Through Output per Satellite Polarity providing Variable Gain
- DC Powering Transfer via Loop-Through Path
- Frequency Range = 950-2150 MHz (up to 2400 MHz)
- Connectors = F(f)
- Impedance = 75 Ohm
- LNB Pow. at SAT-IN = 13/18 V, Max. 500 mA each

RF SPEC – SAT-IN to SUBSCRIBER OUT:

- Gain = 2 dB
- Full Band Flatness = ± 2 dB (with 1,5 dB positive Slope)
- Transponder Flatness = 0,5 dB (36 MHz Bandwidth)
- Isolation OUT-OUT = >35 dB, typ. 42 dB
- IMD = 40 dB (2 Tones at -13 dBm)
- Output Level = max 90 dB μ V (-18 dBm) @30carrier
- Return Loss = 14 dB typ.
- Noise Figure = 8 dB

RF SPEC - SAT-IN to SAT-OUT (LOOP THROUGH):

- Gain = 15 dB adjustable Gain
- Isolation OUT-OUT = >45 dB, typ. 50 dB
- Full Band Flatness = ± 1 dB (with 4 dB positive Slope)
- Transponder Flatness = 0,5 dB (36 MHz Bandwidth)
- IMD = 40 dB (2 Tones at -13 dBm)
- Output Level = max 90 dB μ V (-22 dBm) @30carrier
- Return Loss = 19 dB typ.
- Noise Figure = 8 dB (at Max Gain)

RX SUBSCRIBER PORT CONTROL:

- Section 1 Input (ex. VL) Selection = 13 V / 0 kHz
- Section 2 Input (ex. VH) Selection = 13 V / 22 kHz
- Section 3 Input (ex. HL) Selection = 18 V / 0 kHz
- Section 4 Input (ex. HH) Selection = 18 V / 22 kHz

DRY CONTACT ALARMS:

- SUB-D9 Connector at the Rear (with PIN descript.)
- Relay Contact Load = 65 V / 400 mA
- General Alarm for:
 - LNB Voltage Short Circuit
 - PSU Failure
 - One Power Line Failure

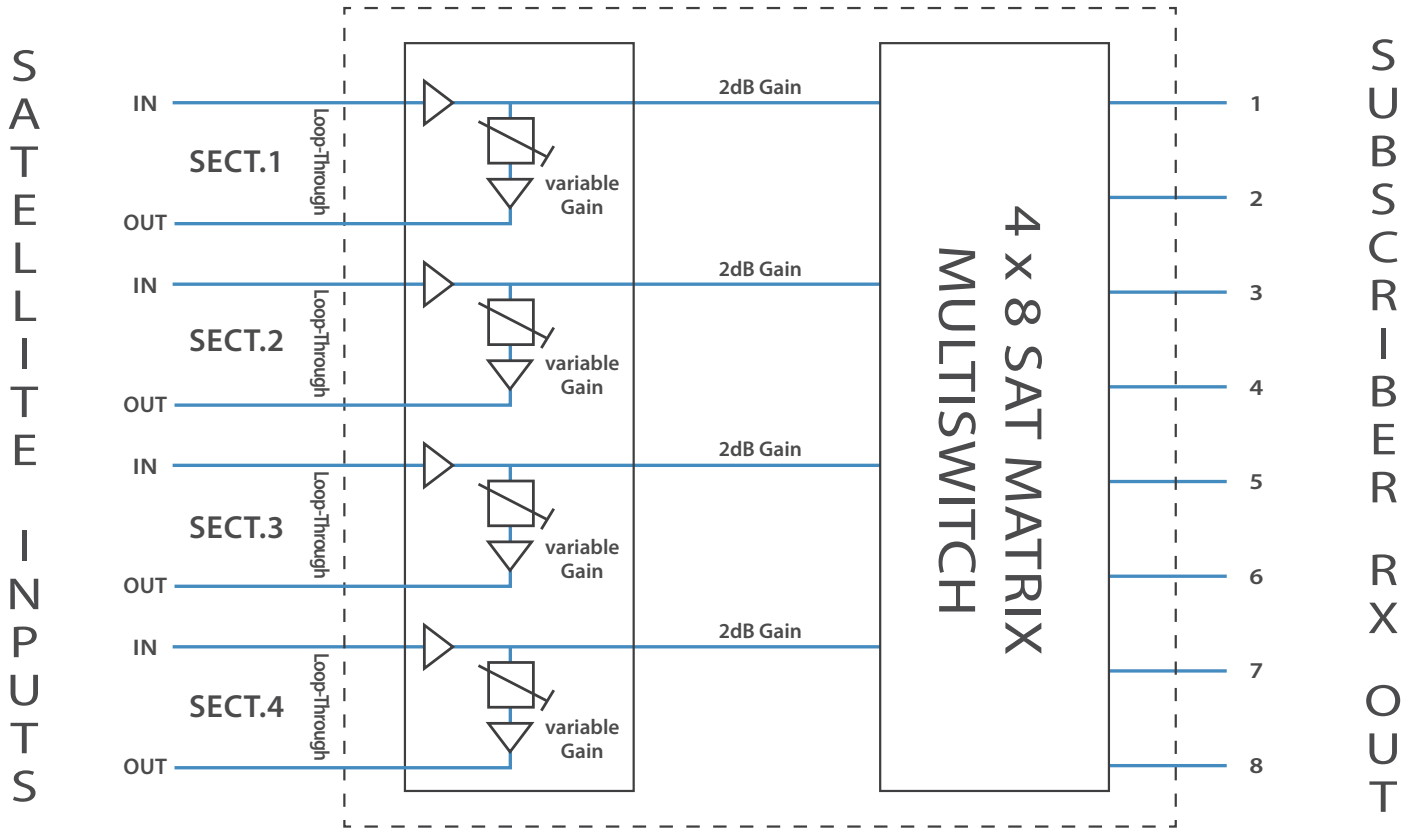
PLUG-IN POWER SUPPLY:

- Hot-Swappable PSU's from the Front
- DC 12 V, 5 A
- 2 AC Receptacles from 2 independent Power Lines
- AC Input Range = 110 to 240 VAC
- Power Consumption = <25 VA

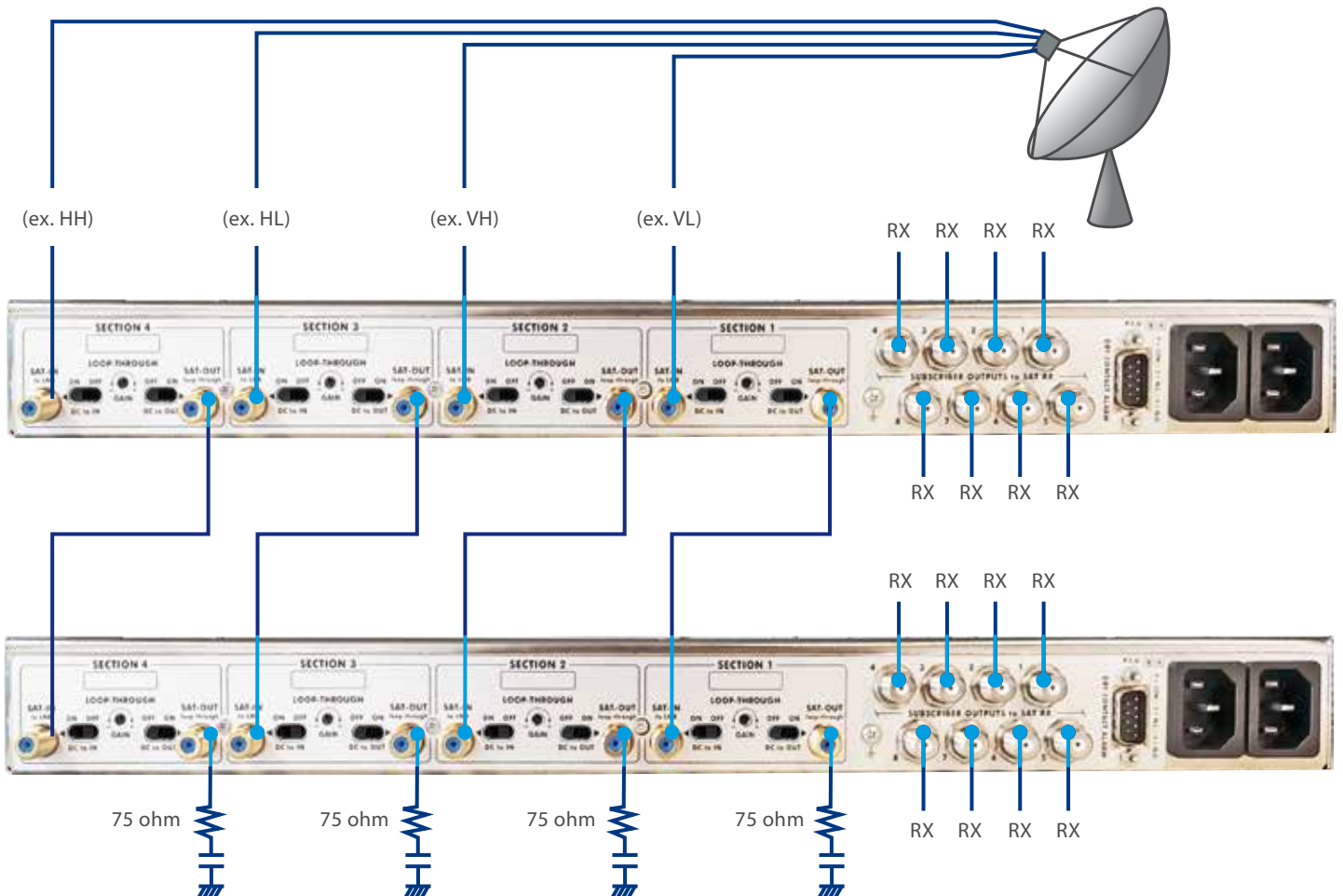
GENERAL SPECIFICATIONS:

- Size = 1 RU 19", 320 mm deep
- Net Weight = <4 kg
- Safety = EN50083-1 & EN60950
- EMC = EN50083-2
- Env. Conditions = -30°/+55°C (Max 60°C)
- Humidity = Max. 95 %

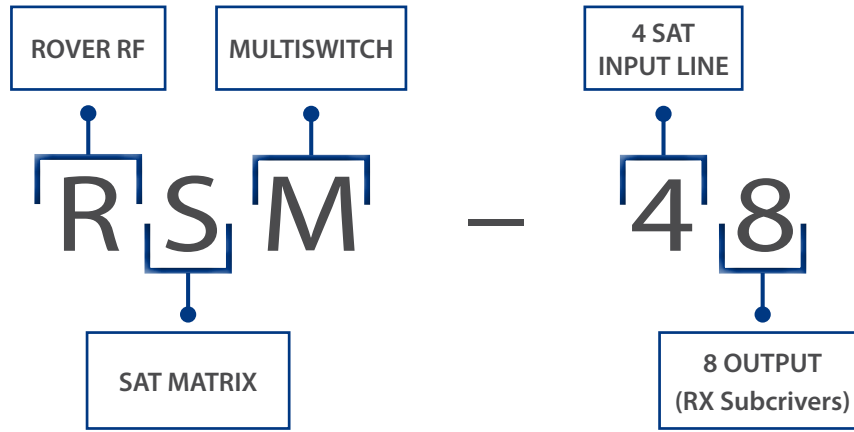
BLOCK DIAGRAM



CASCADABLE INSTALLATION EXAMPLE - 4 SAT IN & 16 RX OUT



ORDERING MODEL & CODE EXPLANATIONS



COMPLETE ORDERING MODEL / CODE EXAMPLE

MODEL	DESCRIPTION	APPLICATION
RSM-48	19" Rack 4 SAT Input and 8 SAT RX Output Matrix Multiswitch, Voltage & Tone control, Loop Through Sat Path with adjustable Gain, redundant hot-swap PSU & dry Contact Alarms.	Teleport & Broadcast



ROVER Laboratories and offices



ROVER Goods entrance & production

V8,6 27-1-22



Product
made in Italy by
Rover Broadcast.com

CERTIFICATES N°
1263 ISO 9001
1264 ISO 14001
1265 ISO 45001



Specifications and features are subject to change without notice.

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