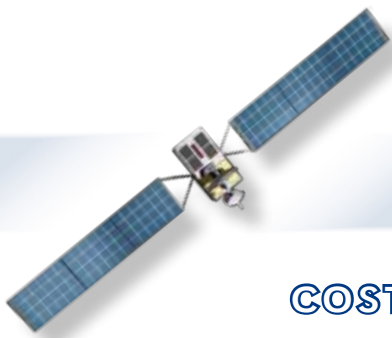




MULTIPLE L-BAND SAT ACTIVE SPLITTERS

700-3000 MHz • 5 YEARS WARRANTY



Rover RF
ACTIVE
SPLITTER
Series

mod. **RAS3-X-X**

COST EFFECTIVE & EASY ASSEMBLY



INTUITIVE ON-BOARD CONTROLLER & DISPLAY for LNB SETUP & ALARMS

UP TO 4 RF INPUTS AND 32 OUTPUTS with REDUNDANT POWER SUPPLY ALL IN 1 U 19" RACK



- 5 YEARS WARRANTY • **HOT SWAP REDUNDANCY PSU**
- MEETS OIP-3, RL and FLATNESS STRICT SPECIFICATIONS
- SEVERAL CONNECTORS AVAILABLE: 50 & 75 HOM IMPEDANCE
- WITH ONLY 3 PARTS OBTAIN SEVERAL SYMMETRICAL & ASYMMETRICAL RF SPLITTERS CONFIGURATIONS
- FRONT PANEL CONTROL DISPLAY & (opt.) DRY CONTACT ALARMS

**INNOVATIVE
PERFORMANCE**

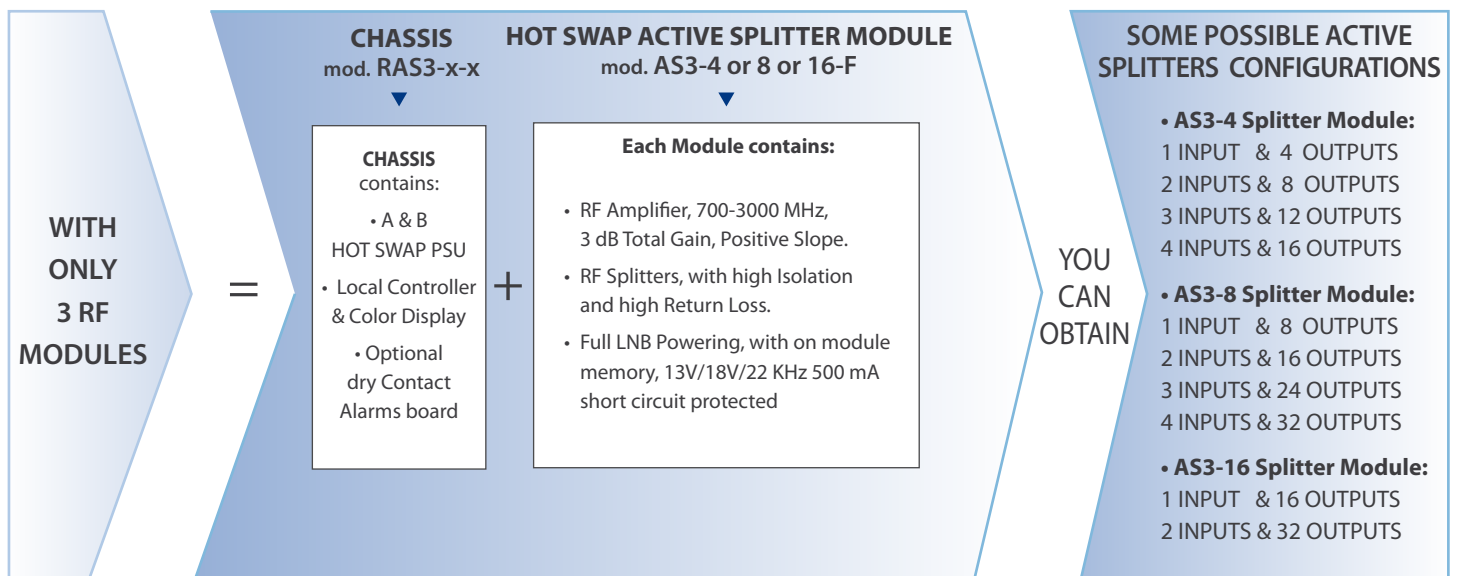
for: SYSTEM INTEGRATOR,
TELEPORT BROADCASTER,
CABLE NETWORK, GOVERNMENT
& MILITARY COMMUNICATIONS



1972 > 2022 >>

50 YEARS OF TECHNOLOGY INNOVATION

LITTLE STOCK = MANY POSSIBLE CONFIGURATION



ACTIVE SPLITTER CONFIGURATION EXAMPLES

4 TIME 4 WAYS



4 TIME 8 WAYS



2 TIME 16 WAYS



1 TIME 4 WAYS + 1 TIME 8 WAYS + 1 TIME 16 WAYS



"RAS3" BENEFIT

- WIDE BAND 700-3000 MHz flat (extended Band)
- Splitter (& Future Combiner) function, all in 1 U 19" Rack
- Easy assembly and fully configurable, from 1 Input to 4 Outputs and up to 4 Inputs to 32 Outputs
- Hot Swap Plug-in RF Splitter Module on rear panel:
 - Programmable LNB Power with on module memory
 - LED for LNBs and Power Supply dry contact Alarms
- Full Custom expandable and rack space optimization
- ON-BOARD: 1,8" LCD Display with Keyboard controller for configuration & Alarms Status

"RAS3" MAIN FEATURES

- Especially designed for SATCOM SYSTEM INTEGRATOR
- Meets strict specifications like: OIP3, R.L. and Flatness
- Inputs RF Port Number: 1 or 2 or 3 or 4
- Outputs Port Number: 4, 8, 16, 24, 32
- Available SPLITTER SLOT:
 - N. 4 with 4 ways each (total 4 IN & 16 OUT)
 - N. 4 with 8 ways each (total 4 IN & 32 OUT)
 - N. 2 with 16 ways each (total 4 IN & 32 OUT)
- Available optional RF connectors: F, SMA, BNC 75 & 50 ohm
- Redundant PSU from 2 different Power lines
- Dry contact Alarm for: PSU and LNBs (optional)
- Fully compatible with all existing System

"RAS3" TECHNICAL SPECIFICATIONS (COMPLETE RACK)

RF PORT CAPACITY:

- Input Port Number: 1 or 2 or 3 or 4
- Output Port Number: 4, 8, 16, 24, 32

RF SPECIFICATIONS:

- Frequency Range = 700-3000 MHz
- Connectors = F (or BNC or SMA opt.)
- Impedance = 75 Ohm (or 50 Ohm opt.)
- Max INPUT Level = 0 dBm typ.
- OP1dB = +17 dBm
- Damage Input Level = 15 dBm
- Input R.L. = >18 dB, 14 dB min.
- Output R.L. = >18 dB, 14 dB min.
- Total Gain = 3 dB, with positive slope
- Gain stability versus Temperature = 0,5 dB from -30° to +60° C
- L Band Flatness = ± 1 dB, 1,5 dB max
- Full Band Flatness = $\pm 1,5$ dB, 2 dB max
- Flatness in 36 Mhz interval = $\pm 0,1$ dB, 0,2 dB max
- Isolation between adjacent out Port = 24 dB typ., 22 min.
- IMD = < -40 dB (2 Tones at -13 dBm)
- Noise Figure = 9 dB

LNB POWER CONTROL (on each AS3 Module):

- D.C. VOLTAGE = OFF, 13V, 18V (or 24 optional) max 500 mA for each Input
- TONE = 22 KHz ON/OFF
- ALARM INDICATION = Via LED, DISPLAY and dry contact

DRY CONTACT ALARM BOARD (optional):

- CONNECTOR = SUB-D9 Male
- CONTACT LOAD = 65 V - 400 mA
- A & B MAINS PSU = one defective or both
- LNB = dc Short Circuit

REDUNDANT POWER SUPPLY:

- N. 2 AC MAINS PSU = 110-240 VAC (with 2 separate receptacle for 2 separate Power LINE)
- AC POWER CONSUMPTION = < 25 VA
- N. 1 EXT DC PSU = 48 V D.C. (optional)

GENERAL SPECIFICATIONS:

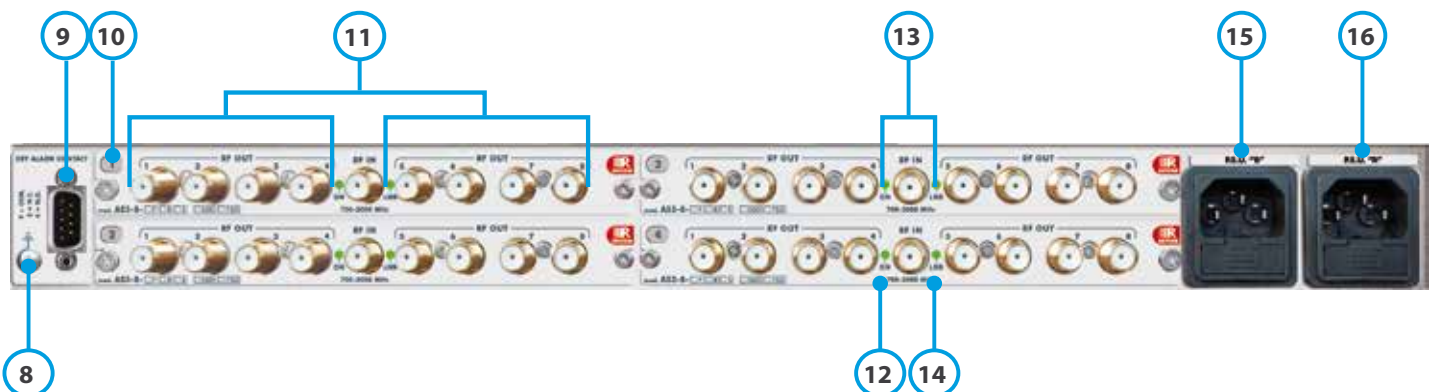
- SLIM CASE = 19" 1U Rack (43 cm deep)
- 1,8" Oled LCD Display
- Keyboard & Joystick
- NET WEIGHT = from 3 to 5 Kg related to the Splitters modules number
- SAFETY = EN 50 083-1 and EN 60 950.
- ENVIRONMENT:
 - Temperature range: -30° / + 55° (max 60°)
 - Umidity 95%
- EMC = EN 50 083-2

FRONT PANEL VIEW



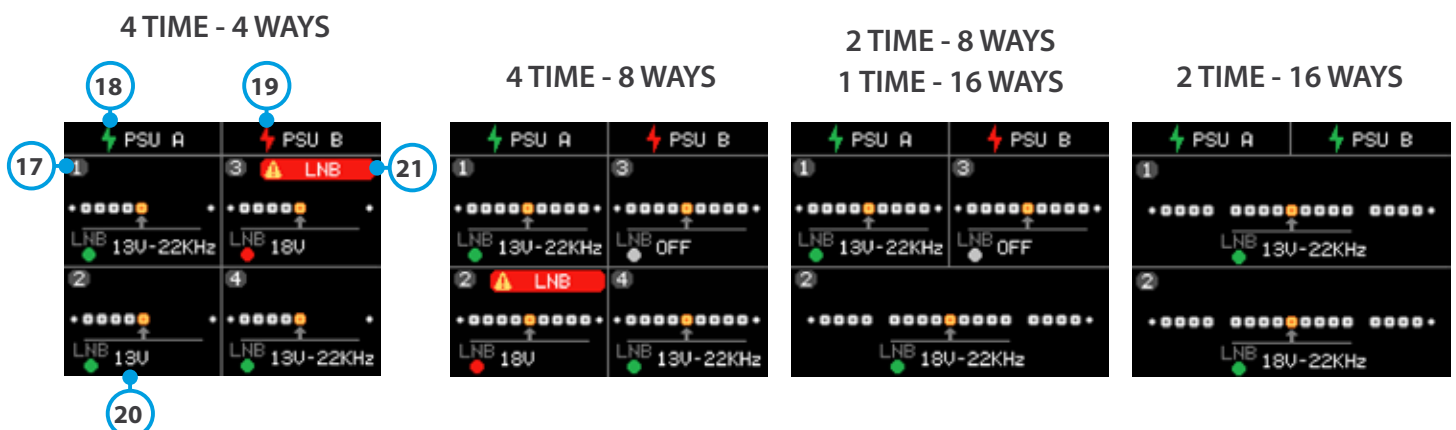
- | | |
|-------------------------------|-----------------------------|
| 1. PSU "A" Status LED | 5. 1,8" Local Display |
| 2. Hot-Swap Redundant PSU "A" | 6. Joystick controller |
| 3. PSU "B" Status LED | 7. General Alarm Status LED |
| 4. Hot-Swap Redundant PSU "B" | |

REAR PANEL VIEW with 4 SWAPPABLE PLUG-IN RF ACTIVE SPLITTER MODULES



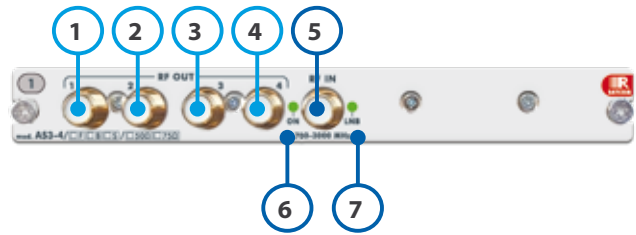
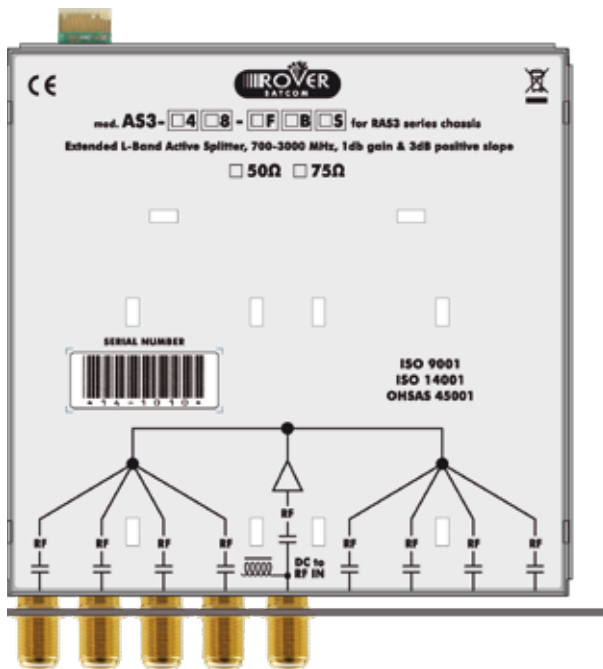
- | | |
|---|------------------------|
| 8. GND Connection Screw | 13. RF INPUT Splitter |
| 9. Dry Contact Remote Alarm, "SUB-D9" male Connector (opt.) | 14. LNB LED (DC@RF IN) |
| 10. Splitter Module position N. (from 1 to 4) | 15. AC Mains, PSU "B" |
| 11. Splitter Outputs | 16. AC Mains, PSU "A" |
| 12. Module "ON" LED | |

FRONT PANEL DISPLAY USER INTERFACE



- | | |
|---|--|
| 17. Splitter Module position Number (Related to back panel) | 19. PSU "B" Status, red = Alarm |
| 18. PSU "A" Status, green = OK | 20. LNB Voltage /DC@RF IN) STATUS & SET UP |
| | 21. LNB Short Circuit ALARM |

"AS3-4" 4WAY EXTENDED L-BAND ACTIVE SPLITTER MODULE



- 1/4. RF Splitter Outputs
- 5. RF Splitter INPUT
- 6. Module power "ON" Led
- 7. LNB Powering LED (DC@RF IN)

RF PORT CAPACITY:

- RF Input Port: N. 1
- RF Output Port : N. 16 (Up to 2 Modules per Equipment)

RF SPECIFICATIONS:

- Frequency Range = 700-3.000 MHz
- Connectors = F (or BNC or SMA opt.)
- Impedance = 75 Ohm (or 50 Ohm opt.)
- Max INPUT Level = 0 dBm typ.
- OP1dB = +17 dBm
- Damage Input Level = 15 dBm
- Input R.L. = >18 dB, 14 dB min.
- Output R.L. = >18 dB, 14 dB min.
- Gain (with positive slope):
 - at 700 MHz = 1 dB typ. $\pm$ 1 dB
 - at 1500 MHz = 2 dB typ. $\pm$ 1 dB
 - at 3000 MHz = 3 dB typ. $\pm$ 1 dB
- Gain stability versus Temperature = 0,5 dB from -30° to + 60° C
- L Band Flatness = 1 dB typ.
- Full Band Flatness = 3 dB typ. positive slope
- Flatness in 36 Mhz interval = $\pm$ 0,1 dB typ
- Isolation between adjacent out Port = 24 dB typ., 22 min.
- IMD = > - 40 dB (2 Tones at -13 dBm)
- Noise Figure = 9 dB

LNB POWER MONITOR & LED (on each AS3 SPLITTER MODULE):

- D.C. VOLTAGE = OFF, 13V, 18V (or 24 optional) max 500 mA for each Input
- TONE = 22 KHz ON/OFF
- LED = green = OK, red = dc short circuit Alarm

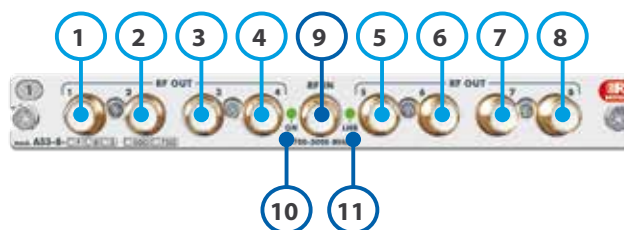
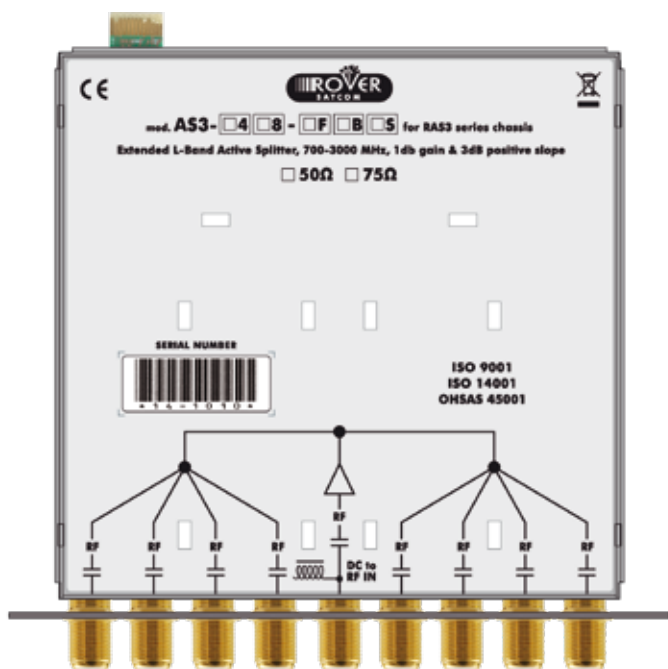
POWER SUPPLY:

- 12 V d.c., 450 mA each module included LNB

GENERAL SPECIFICATIONS:

- Module size: H 2,2 - W 15,0 - D 15,5 cm
- NET WEIGHT = 0,4 Kg
- ENVIRONMENT:
 - Temperature range: -30° / + 55° (max 60°)
 - Umidity 95%
- EMC = EN 50 083-2

"AS3-8" 8WAY EXTENDED L-BAND ACTIVE SPLITTER MODULE



- 1/8. RF Splitter Outputs
- 9. RF Splitter INPUT
- 10. Module power "ON" Led
- 11. LNB Powering LED (DC@RF IN)

RF PORT CAPACITY:

- RF Input Port: N. 1
- RF Output Port : N. 16 (Up to 2 Modules per Equipment)

RF SPECIFICATIONS:

- Frequency Range = 700-3.000 MHz
- Connectors = F (or BNC or SMA opt.)
- Impedance = 75 Ohm (or 50 Ohm opt.)
- Max INPUT Level = 0 dBm typ.
- OP1dB = +17 dBm
- Damage Input Level = 15 dBm
- Input R.L. = >18 dB, 14 dB min.
- Output R.L. = >18 dB, 14 dB min.
- Gain (with positive slope):
 - at 700 MHz = 1 dB typ. $\pm$ 1 dB
 - at 1500 MHz = 2 dB typ. $\pm$ 1 dB
 - at 3000 MHz = 3 dB typ. $\pm$ 1 dB
- Gain stability versus Temperature = 0,5 dB from -30° to + 60° C
- L Band Flatness = 1 dB typ.
- Full Band Flatness = 3 dB typ. positive slope
- Flatness in 36 Mhz interval = $\pm$ 0,1 dB typ
- Isolation between adjacent out Port = 24 dB typ., 22 min.
- IMD = > - 40 dB (2 Tones at -13 dBm)
- Noise Figure = 9 dB

LNB POWER MONITOR & LED (on each AS3 SPLITTER MODULE):

- D.C. VOLTAGE = OFF, 13V, 18V (or 24 optional)
max 500 mA for each Input
- TONE = 22 KHz ON/OFF
- LED = green = OK, red = dc short circuit Alarm

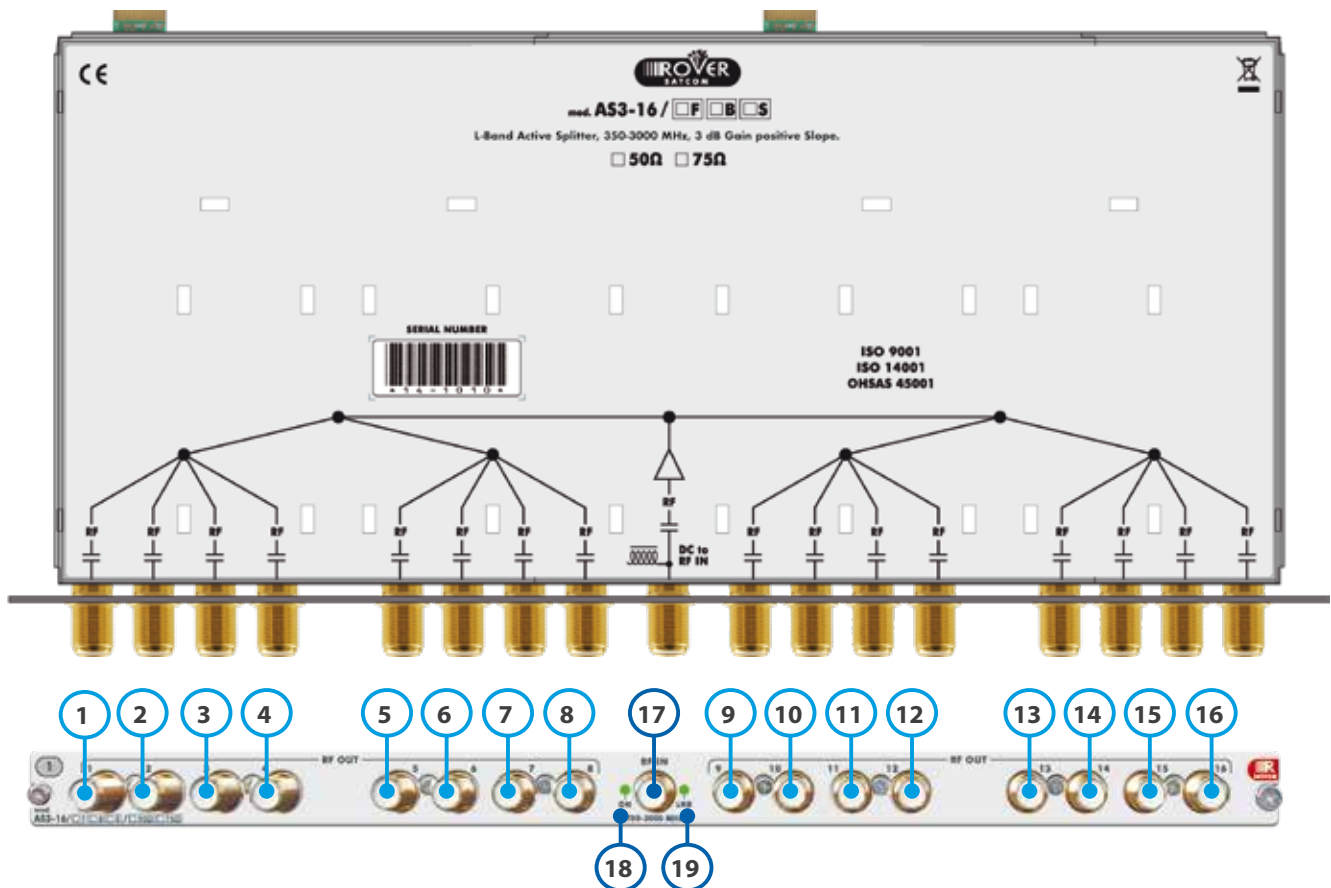
POWER SUPPLY:

- 12 V d.c., 450 mA each module included LNB

GENERAL SPECIFICATIONS:

- Module size: H 2,2 - W 15,0 - D 15,5 cm
- NET WEIGHT = 0,5 Kg
- ENVIRONMENT:
 - Temperature range: -30° / + 55° (max 60°)
 - Umidity 95%
- EMC = EN 50 083-2

Mod. "AS3-16", 16 WAY EXTENDED L-BAND ACTIVE SPLITTER MODULER



1/16 RF Splitter Outputs
17 RF Splitter Input

18 Module Power "ON" Led
19 LNB powering Led (DC@RF IN)

RF PORT CAPACITY:

- RF Input Port: N. 1
- RF Output Port : N. 16 (Up to 2 Modules per Equipment)

RF SPECIFICATIONS:

- Frequency Range = 700-3.000 MHz
- Connectors = F (or BNC or SMA opt.)
- Impedance = 75 Ohm (or 50 Ohm opt.)
- Max INPUT Level = 0 dBm typ.
- OP1dB = +17 dBm
- Damage Input Level = 15 dBm
- Input R.L. = >18 dB, 14 dB min.
- Output R.L. = >18 dB, 14 dB min.
- Gain (with positive slope):
 - at 700 MHz = 1 dB typ. $\pm$ 1 dB
 - at 1500 MHz = 2 dB typ. $\pm$ 1 dB
 - at 3000 MHz = 3 dB typ. $\pm$ 1 dB
- Gain stability versus Temperature = 0,5 dB from -30° to + 60° C
- L Band Flatness = 1 dB typ.
- Full Band Flatness = 3 dB typ. positive slope
- Flatness in 36 Mhz interval = $\pm$ 0,1 dB typ
- Isolation between adjacent out Port = 24 dB typ., 22 min.
- IMD = > - 40 dB (2 Tones at -13 dBm)
- Noise Figure = 9 dB

LNB POWER MONITOR & LED (on each AS3 SPLITTER MODULE):

- D.C. VOLTAGE = OFF, 13V, 18V (or 24 optional) max 500 mA for each Input
- TONE = 22 KHz ON/OFF
- LED = green = OK, red = dc short circuit Alarm

POWER SUPPLY:

- 12 V d.c., 450 mA each module included LNB

GENERAL SPECIFICATIONS:

- Module size: H 2,2 - W 33,0 - D 15,5 cm
- NET WEIGHT = 1 Kg
- ENVIRONMENT:
 - Temperature range: -30° / + 55° (max 60°)
 - Umidity 95%
- EMC = EN 50 083-2

RAS3 Series - Complete 19" 1U Rack Active Splitters Range

with 4 WAYS MODULE	with 8 WAYS MODULE	with 16 WAYS MODULE
mod. RAS3-1x4-F-75 mod. RAS3-2x4-F-75 mod. RAS3-3x4-F-75 mod. RAS3-4x4-F-75	mod. RAS3-1x8-F-75 mod. RAS3-2x8-F-75 mod. RAS3-3x8-F-75 mod. RAS3-4x8-F-75	mod. RAS3-1x16-F-75 mod. RAS3-2x16-F-75
mod. RAS3-1x4-BNC-75 mod. RAS3-2x4-BNC-75 mod. RAS3-3x4-BNC-75 mod. RAS3-4x4-BNC-75	mod. RAS3-1x8-BNC-75 mod. RAS3-2x8-BNC-75 mod. RAS3-3x8-BNC-75 mod. RAS3-4x8-BNC-75	mod. RAS3-1x16-BNC-75 mod. RAS3-2x16-BNC-75
mod. RAS3-1x4-SMA-50 mod. RAS3-2x4-SMA-50 mod. RAS3-3x4-SMA-50 mod. RAS3-4x4-SMA-50	mod. RAS3-1x8-SMA-50 mod. RAS3-2x8-SMA-50 mod. RAS3-3x8-SMA-50 mod. RAS3-4x8-SMA-50	mod. RAS3-1x16-SMA-50 mod. RAS3-2x16-SMA-50
mod. RAS3-1x4-BNC-50 mod. RAS3-2x4-BNC-50 mod. RAS3-3x4-BNC-50 mod. RAS3-4x4-BNC-50	mod. RAS3-1x8-BNC-50 mod. RAS3-2x8-BNC-50 mod. RAS3-3x8-BNC-50 mod. RAS3-4x8-BNC-50	mod. RAS3-1x16-BNC-50 mod. RAS3-2x16-BNC-50
mod. RAS3-1x4-N-50 mod. RAS3-2x4-N-50 mod. RAS3-3x4-N-50 mod. RAS3-4x4-N-50	mod. RAS3-1x8-N-50 mod. RAS3-2x8-N-50	

SPARE PARTS ORDERING CODE

mod. RAS3 chassis:	19" 1 U Rack chassis contains: N. 2 PSU, LCD display, Keyboard Controller with Joystick, Dry Contact Alarm board (opt.).
mod. AS3-4-F-75: mod. AS3-4-BNC-75: mod. AS3-4-SMA-50: mod. AS3-4-BNC-50: mod. AS3-4-N-50:	Hot Swap Active Splitter Module, N. 1 RF Input - N. 4 RF Output, LNB Voltage (DC@RF IN), MAX N. 4 modules per Equipment.
mod. AS3-8-F-75: mod. AS3-8-BNC-75: mod. AS3-8-SMA-50: mod. AS3-8-BNC-50: mod. AS3-8-N-50:	Hot Swap Active Splitter Module, N. 1 RF Input - N. 8 RF Output, LNB Voltage (DC@RF IN), MAX N. 4 modules per Equipment. (N. 2 module only with "N" connectors)
mod. AS3-16-F-75: mod. AS3-16-BNC-75: mod. AS3-16-SMA-50: mod. AS3-16-BNC-50:	Hot Swap Active Splitter Module, N. 1 RF Input - N. 16 RF Output, LNB Voltage (DC@RF IN), MAX N. 2 modules per Equipment.
mod. CLO-AS3:	Blank closure cap for free rear panel slot.

V. 1.3 24-3-22



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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