



# RF over IP Converter

RF OVER IP  
mod. **ROI - 2** 2 Slots



- 950 - 2450 MHz
- NO SNR degradation
- 8 to 16 Bit selectable Sampling
- Delay adjustment
- QSPF Interface
- 2 slots in 1U Rack



**INNOVATIVE PERFORMANCE**

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



1972 > 2023 >>

51 YEARS OF TECHNOLOGY INNOVATION

## RF over IP INTRODUCTION & PHILOSOPHY

The Rover ROI-2 RF over IP converter brings possibility and flexibility of digitizing the RF signal and transmitting it to everywhere in the world. Backup on demand is a game changer for long haul RF transmission.

### Long Distance:

Traditional RF over fiber technique can only make signals be transmitted over short distances (50~100km) before the signal decays. With RF over IP technique, RF signals can be transmitted to any place in the world without distance limitation.

### Cloud-Based RF Environment Possible:

In the past decade Satellite communication has been gradually shifted from traditional analog-based interfaces or data formats to digital. Digitized RF signal converted by ROI-2 can be transported over any IP network and can be stored in cloud-based environments to save cost and increase efficiency.

### Rain Fade Diversity:

As high throughput satellite (HTS) are becoming the main GEO satellites nowadays, site diversity for hub stations is critical to providing reliable services to end users. HTS uses high frequencies, such as, Ka-band, Q-band, V-band, to enlarge the throughput capacity. Consequently, huge rain fade may be experienced in HTS earth stations. ROI-2 provides a reliable and cost-effective solution for rain diversity application.

### RF Interface Diversity:

Along with the development of 5G networks and other higher frequency applications, local interferences may be encountered more often than ever before. ROI-2 provides a key solution for RF interference diversity and brings the most reliable services to the RF world.

### Optical Fiber Backup:

Compared to other physical links, optical fiber is more stable. However, if the optical fiber is cut or there are malfunctions, the troubleshooting is difficult and takes a long time to recover.

Now with ROI-2 converters, it's possible to transmit data through another route to the destination keeping the link operational.

## TECHNICAL SPECIFICATIONS

- **RF Freq. Range:**  
950 - 2450 MHz
- **Instantaneous Band:**  
500 MHz
- **RF Power Range:**  
Input = -70 to 0 dBm  
Output = -30 to 0 dBm
- **Modularity:**  
2 Slot in 1UR, each slot has 1 RF IN & 1 RF OUT
- **Reference:**  
10 MHz IN, BNC connect. 75 Ω  
1 PPS IN, BNC connect. 75 Ω  
1 GPS IN, SMA connect. 50 Ω
- **Delay Adjustment Range:**  
Selectable up to 750 Ms
- **Selectable Sampling:**  
8-10-12-14 to 16 bit
- **Interface:**  
IP = QSFP (40 Gb)  
RF = SMA 50 Ω
- **Management & Control:**  
Ethernet = RJ45
- **Environmental:**  
Temperature = 0° to 55° C  
Umidity = Up to 95%  
non condensating
- **Mains:**  
Dual PS  
110 / 240 Vac, 50/60 H,  
150 W
- **Dimension & Weight:**  
1U Rack, 360 mm depth,  
6 Kg
- **Regulation:**  
CE  
RoHS

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



Product  
made in Italy by  
RoverLaboratories.com

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*Specifications and features  
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