

20 - RF over IP Converter



Datacom IO RF over IP converter brings possibility and flexibility of digitizing 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

Satellite communication has been gradually shifted from traditional analog-based interfaces or data formats to digital in the past decade. Digitized RF signal converted by IO can be transported over any IP network and can be stored in cloud-based environment 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 for providing reliable services to end users. HTS uses high frequencies, such as, Kaband, Q-band, V-band, to enlarge the throughput capacity. Consequently, huge rain fade may be experienced in HTS earth stations. IO provides a reliable and cost-effective solution for rain diversity application.

RFI Diversity

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

Optical Fiber Backup

Compared to other physical links, optical fiber is more stable. However, once optical fiber gets cut and malfunctions, it is difficult to do troubleshooting and takes a long time to recover. Now with IO converters, it's possible to transmit data through another route to the destination and remain the link.



L-band Frequency Range

 L-band Input and Output Frequency Range #1: 950 ~ 1450MHz Range #2: 1350 ~ 2150MHz

L-band Bandwidth

- 25MHz ~ 500MHz
- Step Size: 1MHz

Power Range

- Rx Power Range: -40 ~ 0dBm
- Tx Power Range: -40 ~ 0dBm

Modules and Channels

- Two Slots In One RU Chassis
- Two RF to IP Channels and Two IP to RF Channels

Frequency Reference

• 10MHz

Time Reference

• 1PPS

Jitter Adjustment Range

• 0~750ms, step size 1ms

Sampling Resolution

• 8 bit, 10 bit, 12 bit, 14 bit, 16 bit

Redundancy

• 1:1 or 1:N

Interface

- Optics: QSFP (40Gb)
- RF: SMA 50ohm

M&C

RJ45 Ethernet, Web Control

Environmental

- Temperature: 0°C to +55°C
- Humidity: Up to 95%

Power

- Dual 110/220VAC, 50/60Hz
- 150W

Dimension

44.45mm(H)*482.6mm(W)*360mm
(D)

Weight

• 6Kg (13.2lbs)



Datacom System International Ltd.

www.datacom.com.hk Rm 403., 4/F, Fook Yip Bldg., 53-57 Kwai Fung, N.T., H.K. Tel: (852)23843686 Fax: (852)23841102