

## SM Cirius RFU - Use w/Cirius LM & SHC

**Star Microwave's All-Indoor RF Unit** has been developed for long haul, high capacity microwave transport applications, where high performance and low cost RF performance is required.

The All-Indoor RFU comprises of a compact, flexible chassis, which houses one or two Transceiver Modules and a Filter Branching Network. The complete system can be configured to support 1+0, 1+1 Hot Standby, Space Diversity or a variety of other system architectures.

The Transceiver Module is available in a range of frequencies from 6 to 11 GHz, and is designed to provide the highest output powers available in the industry. The Transceiver Module includes a high power transmitter, low noise receiver, an integrated power supply and integrated cooling and heat dissipation hardware. The Transceiver Module is designed to interface to either



### Product Highlights

- 6 to 11 GHz frequency bands
- 3.5 to 40 MHz RF channel bandwidths
- Supports QPSK and 16 to 256 QAM modulations
- Industry leading output powers
- Designed to meet FCC, ETSI and CE safety and emission standards

### Product Features

- Industry-leading output powers
- Cost effective all-indoor architecture
- Compact, rack mounted design
- Supports all common ITU-R standards and frequency recommendations
- Software configurable microcontroller for monitor and control settings
- Low noise figure, low phase noise and high linearity
- Very high frequency stability

### Applications

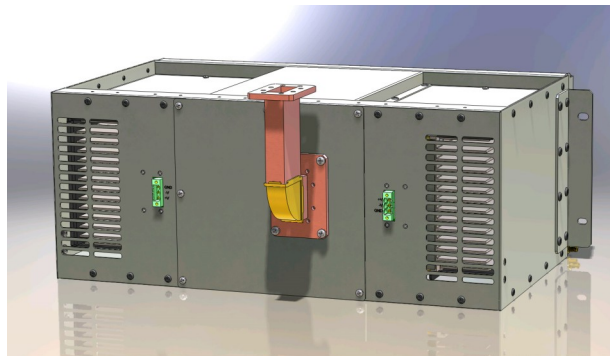
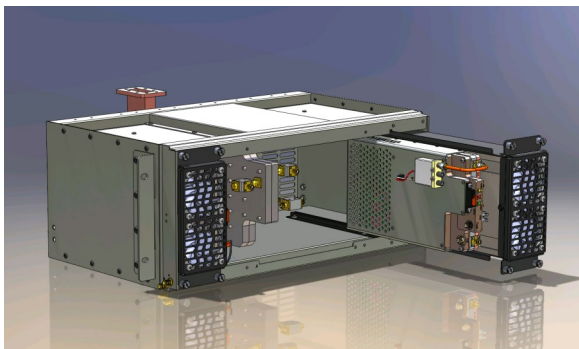
- Long haul SDH and/or IP/Ethernet microwave transport
- High capacity backbone routes
- Trunking networks
- Public safety, utility, private network and enterprise connectivity

# Specifications

FREQUENCY BAND	6 GHz	7 GHz	8 GHz	11 GHz
Frequency Range	5.925 - 7.11 GHz	7.125 - 7.725 GHz	7.9 - 8.5 GHz	10.7 - 11.7 GHz
TR Spacings (MHz)	160, 170, 252.04, 300, 340, 350	154, 160, 161, 168, 196, 245	119, 126, 266, 311.12	490, 500, 530
Channel Bandwidth (MHz)	3.5 to 40			
<b>TRANSMIT</b>				
Tx Power—128/256 QAM * (dBm)	33	32	32	31
Tx Power—64 QAM * (dBm)	35	34	34	33
Tx Monitor	-20 dB sample of output signal			
<b>RECEIVE</b>				
Receiver Noise Figure ** (dB)	3.5			
<b>IF</b>				
IF Center Frequency	350 MHz transmit, 140 MHz receive			
Telemetry	ASK full-duplex at 5.5 MHz and 10 MHz			
<b>PRIMARY POWER</b>				
Voltage Range	-24 to -72 VDC			
Power Dissipation	< 90 W per XCVR @ 48 V			
<b>PHYSICAL PARAMETERS</b>				
Size	19" width x 4U high			
Cooling	Integrated heat sink and cooling per XCVR, air ducts in chassis			
Operating Temperature Range	-5°C to +55°C			
Tx, Rx, IF and Monitor Connectors	SMA female 50 ohm			
Supported Radio Configurations	1+0, 1+1 MHSB, 1+1 MHSB with space diversity, 2+0			

**1+1 Hot Standby Front View**

**1+1 Hot Standby Rear View**



**Star Microwave, 41458 Christy St. , Fremont, CA 94538 USA**  
**Phone +1 510 498.7900 Fax +1 510 498.7901**  
**Email: sales@starmicrowave.com—www.starmicrowave.com**

Specifications and availability are subject to change without notice.  
 Contact Factory for Test Conditions and Specification Changes

Performance specifications are for 1+0 configurations and optimum conditions and may be affected by location, environment, and other operating conditions.  
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