

RF Unit/Full-Indoor RF Unit/Full-Indoor for Digital MW Radio Systems Very High Power 4 to 11GHz Frequency Range



> RFU - In 1+0 Configurations



> RFU - In 1+1 Configurations

Main Features

- High linearity allows high order modulation scheme
- Very High Output Power
- Low power consumption
- Very low Phase Noise
- Superior reliability- High MTBF
- Fully calibrated over the temperature range

Options

- Custom Branchings for 1+1 HSB and FD
- SW selectable BW
- Customer specific IDU Interface
- Customized IF Frequency/Telemetry interface

The RFU - FI™ Full Indoor RF Unit provides a flexible and cost effective OEM solution to System Integrators for SDH radio systems; operating from 4 to 11 GHz, the RFU - FI™ family is your solution for fast time to market, highest performances and reliability.

RFU - FI™ is a SW configurable RF Unit for Full Indoor system available in 1+0 and 1+1 Space and Polarization Diversity. Custom solutions for 1+1 Hot Stand-by and Frequency diversity are available on application.

The advanced features and enhanced capabilities of the RFU - FI™ make it the ideal solution for Radio Links from Super PDH to 2xSTM-1 and Gigabit Ethernet, from QPSK to 128 QAM and from 10 to 56 MHz channel BW.



FREQUENCY SPECIFIC PARAMETERS

Frequency	Standard	Operating Frequency (GHz)	TX Output Power dBm			Noise Figure
			QPSK	16, 32, 64QAM	128, 256QAM	
4Ghz	ETSI/FCC	4,40 to 5,00	+35	+32	+30	< 4,0 dB
6Ghz	ETSI/FCC	5,90 to 7.10	+35	+32	+30	<4 dB
7Ghz	ETSI	7,10 to 7,70				
8Ghz	ETSI	7,70 to 8,50				
10/11Ghz	ETSI/FCC	10,15 to 10,65 10,70 to 11,70	+34	+31	+29	<4,5 dB

VHP PARAMETERS

TX IF interface	350 MHz, -5 to -33dBm		
Rx IF Interface	140 MHz, -12 +/-2 dB over the AGC Range		
Telemetry Interface	Customer specific		
Power control Range	>25 dB		
Power setting resolution	0,5 dB		
Power setting accuracy	2 dB		
Rx AGC Range	-20 to -90 dBm		
SSB tx/rx Phase Noise	4 - 6 - 7 - 8 GHz	11 GHz	
dBc@10KHz	-82	-80	
dBc@100KHz	-103	-100	
dBc@1MHz	-123	-120	
Synthesizer Step	0,25 MHz		
Frequency Stability	2,5 ppm		
Standard Compliance	Radio ESTI EN 302 217, EN 301 216, EN 301 128, EN 300 198		
	Power Supply ETSI EN 300 132-2		
	EMC / Safety ETSI EN 301 489 / IEC EN 60950		

MECHANICAL / ENVIRONMENTAL

Dimensions	19" Rack 6U 482 mm x266mm x 126mm			
Weight	8,5 Kg			
Operatimng Temperature	-5 to +45° C			
Altitude	Up to 4500 meters			
Humidity	0 to 95% non-condensing			
Power Input	-48V DC (-36V to -62V DC)			
Power Consumption	< 55W for each TX/RX			
Cooling	Natural convection			
IF/Telemetry Interface	N-type female			
Antenna Interface	4 GHz	6GHz	7/8 GHz	11 GHZ
	UDR48/N-Type	UDR70 (CPR137)	UDR84	UDR120
Standards Compliance	ETSI ETS 300 019			