

# Evolution IP Access - ANSI

Software Defined Radio: 11, 18 & 23 GHz

Data-rate: 6 - 100 Mb/s

## Benefits:

- ✓ Quick and Easy to install -> In-Service within hours
- ✓ Minimal Maintenance -> Low cost of ownership
- ✓ Low Power Consumption -> Environmental friendly
- ✓ ROI in a few months
- ✓ High System Gain -> Smaller antennas
- ✓ Wideband ODU's -> Few spare parts
- ✓ High MTBF -> Reliable

## Features:

- ✓ Software configurable capacity up to 100Mb/s
- ✓ 2x10/100BaseT
- ✓ Low Latency
- ✓ Packet size up to 2048 bytes
- ✓ 0-4xT1, user enabled/disabled
- ✓ 1+0 and Hot Standby in 1RU



## TECHNICAL SPECIFICATIONS:

### User Interfaces:

Ethernet: 2x10/100BaseT. Connectors: RJ45  
 T1 interface - fixed: 4 x T1/100 ohm, D-type multi-connector  
 NMS: 2x10/100BaseT. Connectors: RJ45

FREQUENCY BAND [GHz]:	10.55 – 10.68	10.7 – 11.7		17.7 - 19.7 / 21.2 – 23.6				
MODULATION [QAM]	128	32	128	16	32/16	128/16/4	128/16/4	16/4
CHANNEL BW [MHz]	5	30	10/5	50/40	30	20	10	5
DATA-RATE [Mb/s]	22	100	50/22	100	100/50	100/50/25	50/25/12	12/6
TX POWER [dBm]	+19	+24	+22	+20	+20/+20	+17/+20/+20	+17/+20/+20	+20/+20
RX TRESHOLD [dBm] BER 10 <sup>-6</sup>	-79	-78	-74/-79	-80	-77/-83	-71/-83/-86	-73/-83/-89	-83/-90

### Power Supply:

-48 (-40.5 to -57) VDC

### Power Consumption (1+0):

Terminal 11 GHz: Average 65 W  
 Terminal 18/23 GHz: Average 52 W

### Temperature Range (operational):

Indoor equipment: -5°C to +55°C (+23°F to +131°F)  
 Outdoor equipment: -33°C to +55°C (-27°F to + 131°F)

### Weight and Dimensions:

IFU: 17.5" x 8.9" x 1RU / 444mm x 225mm x 44mm. Weight: 5.5 lbs / 2.5 kg  
 ODU 11 GHz: 8.9" x 5.5" x 9.4" / 227mm x 140mm x 240mm. Weight: 17.7 lbs / 8.0 kg  
 ODU 18/23 GHz: 8.1" x 5.2" x 8.3" / 206mm x 132mm x 210mm. Weight: 14.3 lbs / 6.5 kg

Max Receive Level (BER<10<sup>-6</sup>): 11/18 GHz: -17dBm, 23 GHz: -20dBm

Emission Designator: [BW]M0D7W. Example: 23GHz in a 50MHz ch., EM=50M0D7W (BW figures from tables above)

### Antennas & Couplers:

FREQUENCY BAND [GHz]:	10.0-10.7	10.7-11.7	17.7-19.7	21.2-23.6	Hot Standby Coupler Loss [dB]	
Antenna Gain (centre)	1ft	n.a	n.a	n.a	Sym Coupler: 6.8 dB	Asym. Coupler: 3.0/13.0 dB
	2ft	n.a	34.4 dB class B	38.7 dB class A		
	2.5ft	36.7 dB class A	37.4 dB class A	41.0 dB class A		
	4ft	40.0 dB class A	40.4 dB class A	44.5 dB class A		
	6ft	43.1 dB class A	43.8 dB class A	47.8 dB class A		

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