

# CERAGON

# SOLUTION GUIDE

OUR RESOURCES ARE YOUR SOLUTION



**CONNECTRONICS**

Distributors of  Wireless and Connectivity Products

# The Ceragon Solution



Ceragon's microwave communication technology provides leading connectivity solutions with the highest capacity and most reliable radio links



## FibeAir® IP-20C

**Multi-core radio technology delivering multi-Gbps anywhere**

- Virtual fiber in licensed frequencies (6-38 GHz)
- 1 Gbps radio throughput over a single 30MHz channel
- More than 2 Gbps capacity using wider channels
- 2048 QAM modulation
- Integrated XPIC in a single unit
- LoS 4X4 MIMO quadrupling capacity using only 2 radio units
- DC connection using either PoE or DC cable



## FibeAir® IP-20S

**Compact, all-outdoor, high-capacity for hauling of edge nodes**

- Single-core radio node
- High radio capacity and spectral efficiency
- Multi-purpose platform, ideal for versatile deployment scenarios
- High service granularity enables rollout of new business models
- Common OS & software-defined engine simplifies network modernization

## FibeAir® RFU-C / RFU-Ce

**All-outdoor solution for packet backhaul with zero footprint**

- All-outdoor, compact size ideal for tower and rooftop installations
- Quick and easy installation and set up
- Highly reliable
- Better availability
- Smaller antennas and high system gain
- High capacity with up to 500Mbps per carrier



## FibeAir® RFU-A

**Indoor mount high transmit power RFU designed for compact long-haul applications**



## FibeAir® RFU-HP

**High transmit power RFU designed for long haul applications**



RFU Featureset		IP20C HPR2	IP-20C	IP-20S	RFU-C*	RFU-Ce*	RFU-Ae*	RFU-HP*
Installation Type	Split				X	X		X
	All Indoor						X	X
	All Outdoor	X	X	X				
Frequency Support		6-11GHz	6-38GHz	6-38GHz	6-38GHz	6-38GHz	5.8-11GHz	6-11GHz
Max Throughput (1+0)		1Gbps+	1Gbps+	1Gbps+	400Mbps	500Mbps	500Mbps	300Mbps
Modulation		4 - 2048QAM	QPSK-2048QAM	QPSK-2048QAM	QPSK-256QAM	QPSK-1024QAM	QPSK-1024QAM	QPSK-1024QAM
Max FCC Channel		80MHz	80MHz	80MHz	56MHz	56MHz	56MHz	56MHz
Max Tx Power		35dBm	29dBm	29dBm	26dBm	26dBm	33dBm	33dBm
XPIC		X	X		X	X	X	X
MIMO		X	X					
POE			X	X				
DC		X	X	X				

\*Max 256QAM/40MHz channel when used with IP10E chassis

## Indoor Units (IDU)

IDU Featureset	IP-20G	IP-20A configurable
GiGE Interfaces	2x SFP/4x GigE	Nx Eth/sfp
TDM Interfaces	16 T1	Nx T1, OC3
Radio Interfaces	2x TNC-F	up to 10 TNC-F
Power	2x 48VDC	2x 48VDC

### FibeAir® IP-20G

#### High-capacity, hybrid, split-mount for edge and ring nodes

- Optimized tail/edge solution supporting seamless integration of radio (L1) and end-to-end Carrier Ethernet transport/services (L2) functionality
- Rich packet processing feature set for support of engineered end-to-end Carrier Ethernet services with strict SLA
- Integrated support for multi-operator and converged backhaul business models, such as wholesale services and RAN-sharing
- Highest capacity, scalability and spectral efficiency
- High precision, flexible packet synchronization solution combining SyncE and 1588v2
- Best-in-class integrated TDM migration solution
- Future-proof with maximal investment protection
- Supports RFU-Ce for modulations up to 1024QAM
- Specifically built to support resilient and adaptive multi-carrier radio links, scaling to GE capacity



### FibeAir® IP-20A

#### Ultra-high power multi-radio solution

- Highest capacity, scalability and spectral efficiency
- Specifically built to support resilient and adaptive multi-carrier radio links, scaling to GE capacity
- Rich packet processing feature set for support of engineered end-to-end Carrier Ethernet services with strict SLA
- Best-in-class integrated TDM migration solution
- Future-proof with maximal investment protection



### FibeAir® IP-20 Assured Platform

#### A single platform for mission critical wireless backhaul needs

##### Enhancing your network reliability & security

##### Keep ahead of threats. Keep your data safe.

- Validated FIPS 140-2 specs for cryptography module
- FIPS 140-2 level 2 physical security
- AES 256 encryption (FIPS 197) over radio links
- Secured communication and protocols for management interface
- Centralized user authentication management via RADIUS
- Advanced identity management and Password policy enforcement
- Security events log
- Secure product architecture and development

