FibeAir® 70F
High-Capacity 70/80 GHz Backhaul Solution

FibeAir 70F is an all-outdoor wireless packet family of products featuring carrier-grade, high-capacity support for 71-76 / 81-86 GHz regulated E-Band. Designed with stringent wireless backhaul requirements in mind, FibeAir 70F seamlessly increases backhaul capacity, offering support for any topology including ring, mesh and asymmetrical broadband applications.

Increased demand for capacity in broadband and mobile networks requires low-cost, high capacity solutions while spectrum shortage, power and cost limit wireless backhaul expansion. FibeAir 70F answers the need for, power-efficient, high-capacity millimeter radio while providing rich networking functionality in a compact, easy to install and maintain form factor. With built-in ring protection, FibeAir 70F supports any topology including simple point-to-point, daisy-chain, ring and mesh configurations. Advanced OA&M features accompanied by Ceragon’s Network Management System enable seamless integration into any carrier-grade network.

FibeAir 70F’s robust yet compact design features Adaptive Modulation and Coding to enable operators to maintain, prioritize, and verify service levels in all weather conditions while achieving maximum link availability. FibeAir 70F’s ultra-high capacity offers a low total cost of ownership solution leveraging the untapped 70/80 GHz spectrum to alleviate bandwidth bottlenecks in next-generation networks.

Highest Value

- **Broadband backhaul optimized performance**
  1000Mbps full duplex throughput
- **Reliable transmission**
  - Adaptive Bandwidth, Coding and Modulation
  - Robust Ethernet protection
- **Seamless integration**
  All-packet with advanced Ethernet functions and OA&M tools
- **Instant link setup**
  All outdoor, small form factor and small antenna footprint
- **Low operational cost**
  Fully managed, power efficient, with Power-over-Ethernet
Key Features

Highest capacity and efficiency
- Up to 1,000 Mbps full duplex
- Up to 4,500 meters (14,765 ft.) depending on rain zone
- 71-76 / 81-86 GHz according to ETSI / FCC regulations
- Hitless and errorless Adaptive Bandwidth Coding & Modulation (64 QAM to QPSK)
- Channel bandwidth from 250-500 MHz (adaptive from 500 MHz to 125 MHz or from 250 MHz to 62.5 MHz)
- Adaptive FEC coding rates from rate 4/5 to rate 1/8

Simplified network design and maintenance – reducing Capex and Opex
- Integrated Carrier Ethernet switch
- Network Management System
- Local and remote (in-band), CLI, SNMP or web-based
- Comprehensive OA&M tools – Service and link level (802.3ah / 802.1ag / y.1731)

Flexible synchronization
- ITU-T G.8262 Synchronous Ethernet
- Timing-over-packet optimized transport

Enabling support for services with stringent SLA
- Provider Bridge (802.1ad)
- Quality of Service (QoS) and prioritization (802.1Q)
- Resiliency –, G.8032 (Ethernet Ring Protection)

Carrier-grade design
- Power - DC and Power over Ethernet (PoE)
- Environmental - According to EN 300 019
- Data Interfaces - 10/100/1000BaseX copper and optical
- All SMT chip based solution for high reliability, low power consumption and small form factor

Ceragon Comprehensive Network Offering: