Evolution IP-20 LH

Evolution IP-20LH is a versatile microwave radio solution for long-distance, high-capacity telecommunication networks. It allows carriers to migrate smoothly from their legacy TDM networks to all-IP and LTE/LTE-A, satisfying the ever-increasing demand for capacity while maintaining current revenue-generating services without interruption.

Today, use of mobile networks is evolving very rapidly. Subscribers want services far beyond voice, SMS and email. They are burdening networks with new, bandwidth-hungry data, audio, video and applications. This demand is driving down revenue-per-bit causing operators to switch to more efficient packet technology including evolution to LTE-A. But the shift from legacy TDM to IP can be difficult, expensive and interruptive.

Ceragon’s Evolution IP-20LH solution provides an easy upgrade path from legacy TDM to all-IP. It offers full—and even enhanced—support for current TDM while giving operators an easy path to all-IP, supporting their subscriber services smoothly throughout the process. Ceragon’s long-term experience in bringing technological innovation to long-distance communication links provides operators with an unmatched solution for fast, cost-effective and manageable network evolution, fully interoperable with Ceragon installed-base trunks.

In addition to the industry-standard all-indoor configuration, Ceragon provides a technological breakthrough with its split-mount configurations. Evolution IP-20LH provides full transmit power in split-mount, providing the highest system gain in the market to deliver robust and resilient links. Network operators are free to choose the configuration that best meets their cost, power-consumption and performance objectives, and Evolution IP-20LH delivers.

Multi-Carrier Trunk Node

- Multi-purpose high power trunk solutions
  - All-indoor as well as split-mount configurations
  - Highly effective branching system

- Multi-gigabits radio capacity with high spectral efficiency
  - Up to 2048 QAM modulation
  - Hybrid multi-carrier Adaptive Bandwidth Control for SDH and Ethernet

- Future-proof, high availability and reliability
  - Up to 8 radio carriers in 2RU, no-SPoF design
  - Multiple 1GE and 10GE interfaces

- Facilitates network modernization
  - Multi-service support (hybrid) for TDM and packet
  - Fully interoperable with Ceragon Evolution installed-base radios

- Common OS & software-defined engine
  - Unified CeraOS software across entire IP-20 platform
  - Powered by programmable network processors
  - MPLS-TP and SDN-ready
### Key Features

#### Multi-purpose high-power trunk solutions
- All-indoor and split-mount configurations
- High transmit power – up to +30 dBm
- Low loss branching system

#### Multi-gigabits radio capacity with high spectral efficiency
- QPSK–2048QAM with full range of hitless and errorless Adaptive Coding & Modulation (ACM)
- Additional capacity boost using innovative Header De-duplication
- Interfaces: E1/STM-1/1GE/10GE

#### Future-proof, high availability and reliability
- High carrier density - up to 8 radio carriers in 2RU
- Full redundancy – no-single-point-of-failure design
- Diversity: Space (baseband switching/ IF combining), frequency, quad (hybrid diversity)
- Ring/mesh support with sub-50msec convergence including G.8032 and MSTP

#### Facilitates network modernization
- Multi-service support (hybrid) - fully interoperable with Ceragon Evolution installed-base radios
- Hybrid Multi-carrier Adaptive Bandwidth Control (ABC)
- Intelligent networking functions - MEF Carrier Ethernet 2.0-compliant

#### Common OS and software-defined engine
- Powered by programmable networking processor that future-proofs CAPEX investment
- Unified CeraOS operating system across the entire IP-20 platform
- Integrated synchronization solutions: Native/SyncE/IEEE1588
- Integrated Carrier Ethernet switching, MEF Carrier Ethernet 2.0 compliant
- MPLS-TP and SDN-ready

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**Ceragon Comprehensive Network Offering:**

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