



# MINI-LINK™ CN

## Ericsson's cost efficient compact nodes for hops and access sites

Ericsson has over 40 years of microwave experience with more than 3 million radio units delivered to over 170 countries. Ericsson is the market leader in microwave transmission, which is the most competitive choice for capacities up to 1 Gbps.

MINI-LINK CN is a compact and easy to install microwave transmission node built with simplicity in mind. MINI-LINK CN is optimized for end sites, single hops, and enterprise networks.

## Used in a number of different scenarios:

- **New roll-out of mobile backhaul networks;** in mobile backhaul networks MINI-LINK CN is a perfect fit at the access site with MINI-LINK TN on the other side of the hop, at the aggregation site, supporting the packet network end to end.
- **Evolution of mobile backhaul networks;** MINI-LINK CN supports a cost efficient migration to packet as data traffic increases in the network. Any mix of Native Ethernet and Native TDM is transported over the link.
- **Fixed Broadband over Microwave;** connecting Enterprises or rural areas to existing transport networks with microwave is a well proven cost efficient solution.
- Enterprise, Broadcasting and National security customers can successfully deploy both single hops, and complete networks.

## Handling your IP network evolution

MINI-LINK CN supports any network scenario; both new packet-only networks as well as evolutions from TDM to packet. It fully supports carrier grade networks with Native Ethernet and carrier-grade QoS for Ethernet, IP as well as MPLS and sync distribution in packet networks.

## Ethernet Switching

Integrated non-blocking Gigabit Ethernet switch and Provider Bridge (IEEE 802.1D, 802.1Q, 802.1ad compliant). Switching capacity up to 24Gbit/s full duplex. QoS with 8 priority queues using SPQ and WFQ. MSTP and RSTP functionality. Policing according to MEF. LAG (IEEE 802.1AX). WRED. Link OAM (IEEE 802.3ah). LLF (Link Loss Forwarding) for error detection. Jumbo frames. IGMP Snooping.

## Network Synchronization

The Network Synchronization provides selection of clock source for the node and squelches on the outgoing interfaces when network synchronization is enabled. Sync output via TDM traffic, dedicated 2 MHz sync port, Sync E, NTP transparent, 1588v2 are supported. 1588v2 includes frequency and time phase synchronization, OC, BC, TC.

## Adaptive Modulation

The Radio Link supports hitless adaptive modulation for 4-1024 QAM over 7-56 MHz channels.

## Header Compression

Optimizing the utilization of the available Radio Link resources by compressing headers such as Ethernet, MPLS, IPv4, IPv6, UDP.



## TECHNICAL SPECIFICATIONS MINI-LINK™ CN R2

|                               |  |
|-------------------------------|--|
| Radio link                    | <ul style="list-style-type: none"><li>• 570 Mbps over 56 MHz using 1024 QAM (ETSI). 510 Mbps over 50 MHz using 1024 QAM (ANSI). 1.1 Gbps using XPIC</li><li>• TX power: -10 to +30 dBm</li><li>• TRX Receiver threshold (10<sup>-6</sup> BER): -60 to -92 dBm</li><li>• 1+0, 2+0 and 1+1 working and hot standby</li></ul> |
| Antennas                      | <ul style="list-style-type: none"><li>• High performance and super high performance</li><li>• Single and dual polarized</li><li>• Integrated and separate installation</li><li>• 0.2/0.3/0.6/0.9/1.2/1.8/2.4/3.0/3.7 m 8 in. 1/2/3/4/6/8/10/12 ft</li></ul>  |
| Frequencies                   | 5, 6, 7, 8, 10, 11, 13, 15, 18, 23, 26, 28, 32, 38 & 42 GHz (ETSI)<br>6, 7, 8, 10, 11, 13, 15, 18, 23, 24, 28, 38 GHz (ANSI)<br>60 and 80 GHz are supported by attaching MINI-LINK PT  |
| Configuration                 | 1+0, 2+0 and 1+1 working and hot standby   |
| Interfaces                    | <ul style="list-style-type: none"><li>• Ethernet 4 x 10/100/1000 BASE-T x 2 x 8FP</li><li>• PDH and E1 over CES 16 x E1, 120 or 75 Ohm</li><li>• O&amp;M / Site LAN 100 BASE-T</li><li>• User I/O 4 input + 2 Output</li></ul>   |
| Power consumption             | 28.3 W (1+0, with DC Pass)   |
| Synchronization               | Sync E, 1588v2, NTP transparent, E1 and 2 MHz  |
| Power Supply                  | -48 VDC, with redundant power supply   |
| Weights                       | 2.82 kg / 6.2 lbs  |
| Dimensions (HxWxD)            | 240 x 440 x 45 mm,<br>9.5 x 17.3 x 1.8 inch  |
| Standards and Recommendations | CEN/CENELEC, ETSI, ITU, IEC, IEEE, IETF  |
| Operational Temperature       | -45°C to +60°C / -49F to +140F<br>-25°C to +60°C / -13F to +140F   |
| Data Communication Network    | <ul style="list-style-type: none"><li>• IP DCN and Site LAN service</li><li>• DCN interfaces via 10/100 BASE-T, E1, E0</li><li>• In-band transport over Microwave</li></ul>  |
| Network Management            | Supported by IP transport NMS, ServiceON, Craft and CLI<br>SNMP v3, SSH, RADIUS, TACACS+   |