MINI-LINK 6352
TECHNICAL PRESENTATION
CONTENT

› E-band
› Ericsson Radio System
› MINI-LINK 6352
› Features
› Use cases
› Design considerations
› Site solutions
E-BAND

› E-band has a solid footprint

› Offers wide spectrum and channels that give very high capacities

› Light licensing regime and/or low spectrum fees

› Hop lengths – km range - suitable for dense urban environment
MINI-LINK as an integrated part
ERICSSON RADIO SYSTEM
MINI-LINK 6352

70/80 GHz frequency band

5 Gbps capacity

10 GE interfaces
MINI-LINK 6352 DATASHEET

› **Radio link**
  - 250, 500 & 750 MHz channel BW
  - BPSK to 256 QAM
  - TX power: +12 to +15 dBm
  - RX Receiver threshold: -75 to -44 dBm
  - Multi Layer Header Compression typically adds 10-20% higher capacity

› **Physical dimension**
  - 4 kg (IP 65)
  - 321x259x108 mm (H x W x D)

› **Interfaces**
  - Traffic: 3 x Optical SFP/SFP+ (1, 2.5 & 10 Gbps)
  - Traffic: 1 x Electrical PoE (1 Gbps)
  - O&M port: 10/100 BASE-T IEEE802.3
  - -48V / PoE (proprietary)
MINI-LINK 6352
DATASHEET

› State-of-the-art L2 switch
  – Customer bridge
  – Provider bridge / Q-in-Q
  – Service OAM FM and PM
  – RSTP
  – LAG/LACP

› Enable a fair share of bandwidth with
  – WFQ
  – Policing
  – Shaping

› Sync
  – Support for SyncE and 1588v2 TC

› O&M via CLI and Embedded WebGUI

› Antennas: 0.2, 0.3 and 0.6 m
SW Features
› MINI-LINK 6352 Basic SW
› MINI-LINK 6352 Eth Provider Mode
› MINI-LINK 6352 SOAM FM/PM
› MINI-LINK 6352 Adaptive Modulation
› MINI-LINK 6352 Header Compression
› MINI-LINK 6352 RL Bonding
› MINI-LINK 6352 Node GUI
› MINI-LINK 6352 1588v2 Enhanced Sync

Capacity licenses
› MINI-LINK 6352 TX HP
› MINI-LINK 6352 Enable Eth port
› MINI-LINK 6352 10 Gb per port
› Capacity licenses: 100 Mbps to 5 Gbps
**Base and Value packs**

- Base Package MINI-LINK 6352
- Advanced Ethernet MINI-LINK 6352
- Capacity Booster MINI-LINK 6352
- O&M usability MINI-LINK 6352
- Phase&Time 1588 MINI-LINK 6352

**Capacity licenses**

- MINI-LINK 6352 TX HP
- MINI-LINK 6352 Enable Eth port
- MINI-LINK 6352 10 Gb per port
- Capacity licenses: 100 Mbps to 5 Gbps
USE CASES

› Quick and easy deployment

› Serve as high capacity backhaul to RBS macro cells, rural or urban

› Aggregation of multi-standard RBS sites

› Aggregation of multiple RBS sites

› Complement to fiber
MINI-LINK 6352
2+0 AND 1+1

› 10 Gbps using RLB (2+0)

› 5 Gbps with high availability (1+1)

High capacity with high availability
MINI-LINK 6352
WITH MINI-LINK 6691 OR MINI-LINK TN

› Supporting increased backhaul traffic
  – Up to 10 Gbps north bound link with E-band

› Modular building practice
  – Split and all outdoor
DESIGN CONSIDERATIONS

› Hop lengths for MINI-LINK 6352 as a function of:
  › Availability
  › Channel spacing
  › Different rain zones
MAX HOP LENGTHS
250 MHZ & 256QAM – 0.6M ANT

Hop lengths for different rain zones
(Based on BER $10^{-6}$ RX thresholds, 250 MHz, 256QAM & 0.6m antennas)
HOP LENGTHS
250 MHZ & 256QAM - 0.3M ANT

Hop lengths for different rain zones
(Based on BER 10^{-6} RX thresholds, 250 MHz, 256QAM & 0.3m antennas)
MAX HOP LENGTHS
750 MHZ & 256QAM – 0.6M ANT

Hop lengths for different rain zones
(Based on BER 10^-6 RX thresholds, 750 MHz, 256QAM & 0.6m antennas)
MAX HOP LENGTHS
750 MHZ & 256QAM – 0.3M ANT

Hop lengths for different rain zones
(Based on BER 10^-6 RX thresholds, 750 MHz, 256QAM & 0.3m antennas)
SITE SOLUTIONS
POWER OPTIONS

› -48 V + Opto

› -48V + Opto hybrid solution

› PoE