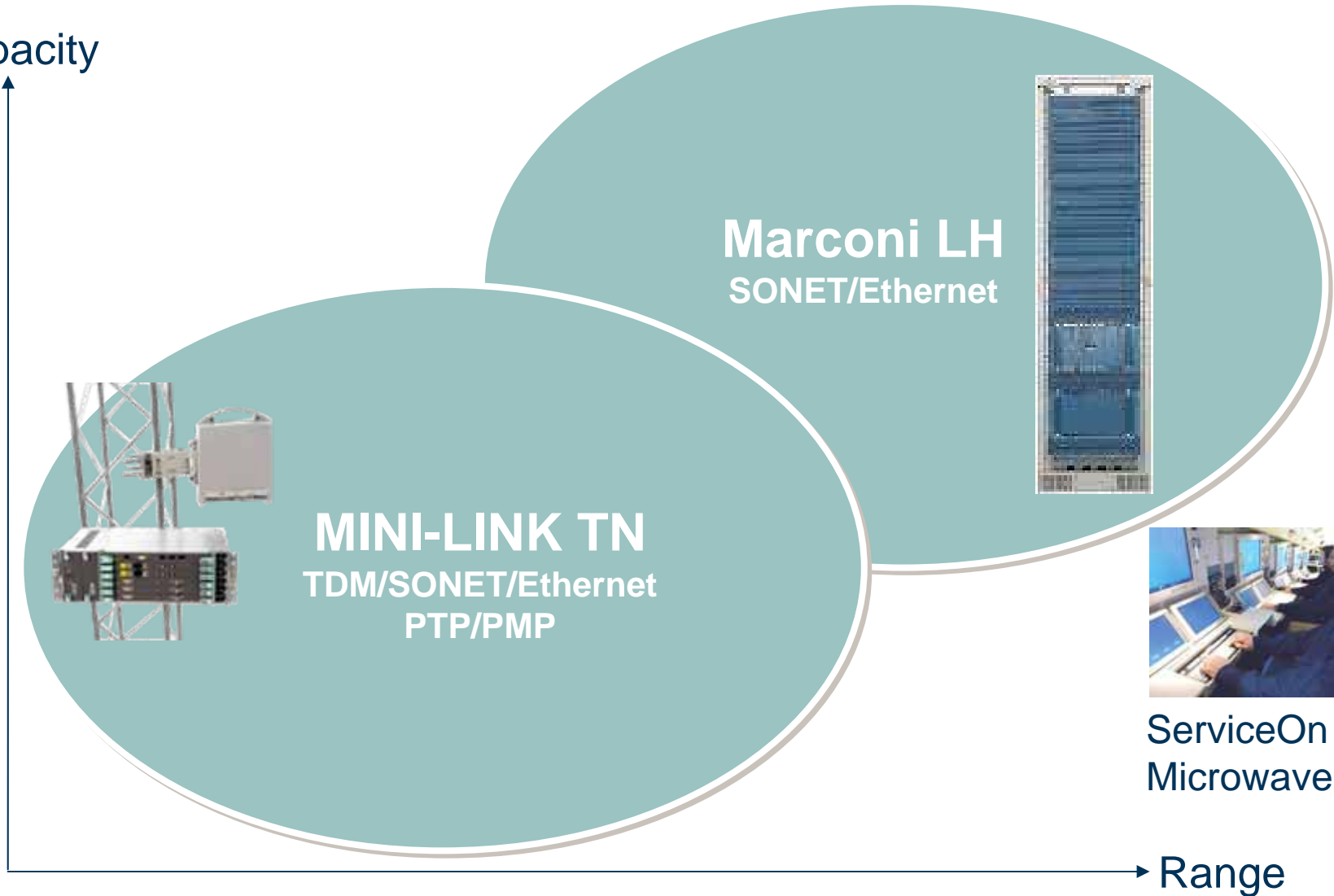


Ericsson complete microwave portfolio

Capacity



Market Position

MINI-LINK TN

- 30 years in microwave business
- The world's largest microwave production facility - 6,000+ radios/week
- Over 1.7 million radios installed
- 40% of base stations world wide are connected with MINI-LINK
- Carrier Class reliability



MINI-LINK terminals have a typical MTBF of over 50 years –
a proven figure based on repair statistics

MINI-LINK TN System Introduction

Ericsson's Market Position – North America

Over 7,000 radio terminals shipped to North America since 2002

Wireless Carriers:

- **AT&T (US)** AZ, MD, MA
- **T-Mobile (US)** CA, KY, AL, HI, WA, OR
- **Sprint (US)** TX, NM, FL, OR
- **ACS (US)** AK
- **Digitel (US)** AK
- **Bell Canada(CA)** BC
- **Rogers (CA)** BC, AL, QU
- **Telus (CA)**

Wireline Carriers:

- **BellSouth (US)** LA

Carriers' Carriers:

- **TTM (US)** VA, WA,PA, MN
- **Nextlink (US)** CA

MINI-LINK TN

A powerful microwave platform for building networks

Key Features

- Hybrid TDM/SONET/Ethernet, nodal architecture
- Software configurable radio link capacity supporting pay-as-you-grow
- Remote set-up and re-configuration of traffic connections
- Multiple versions for different needs
- Supports tree-and-branch, star and ring/mesh topologies
- Automatic test and built-in analyzers



MINI-LINK TN

A powerful microwave platform for building networks

Main features

- One radio, 6 to 270 Mbps
- Supported frequency bands: 6 to 38 GHz
- DS1, DS3, OC-3, FE and GbE interfaces
- Built-in L1 cross-connect and aggregation
- Built-in L2 aggregation/switching
- Powerful protection schemes (system & traffic)
- Common Management System



Aggregation nodes

Edge nodes

Common Radio

MINI-LINK Traffic Node components



Radio units

- RAU X

Magazines



AMM 2p B



AMM 6p C
AMM 6p D



AMM 20p B

Plug-in units

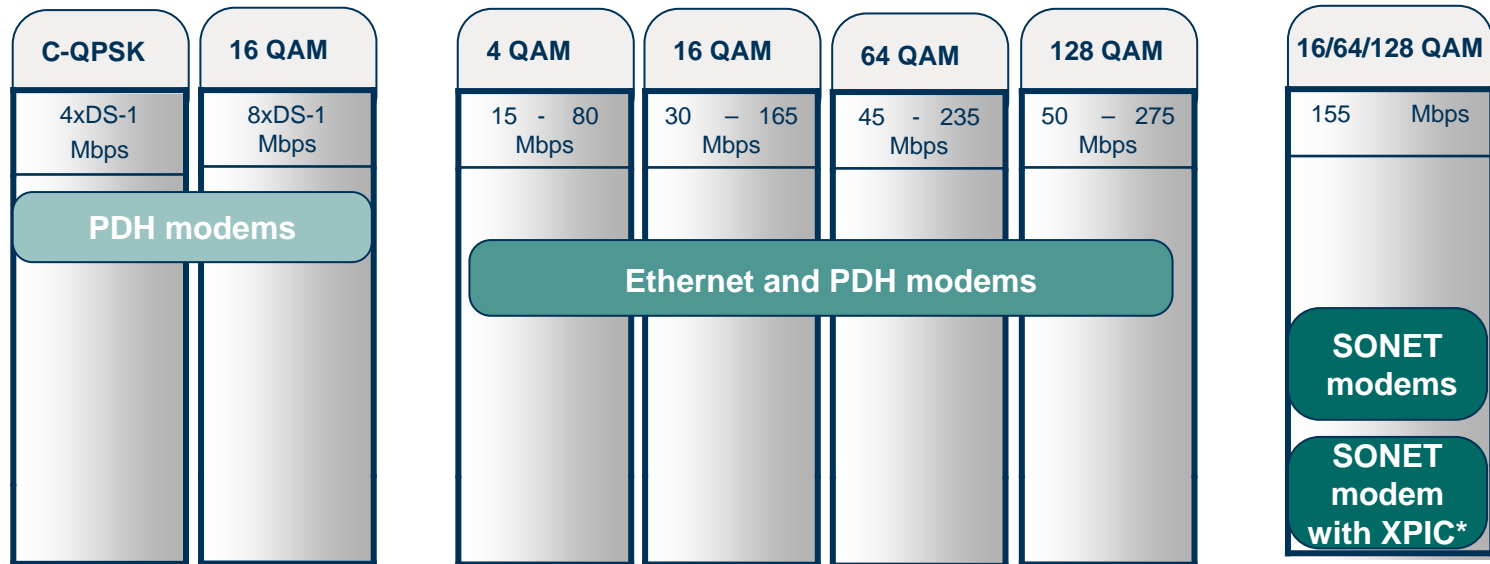


- Node Processor Units
- Modem Units
- Line Termination Units
- Ethernet Termination Units
- Power Supply Units
- Fan Units

Accessories and Installation Material

- Antennas
- Power splitters
- Cables
- Enclosures

Modems



*XPIC for SONET available with 128 QAM

- Capacity and modulation agile modems optimized for Ethernet, PDH & SONET transport
- MINI-LINK TN handles Ethernet over any of these modems

Multi Agile Radio

RAU X



- RAU X/RAU N
 - Modulation agile, C-QPSK and 4-256 QAM
 - Capacity independent
 - Transport technology agnostic
 - Fix and Adaptive modulation capable
- Compact radio case
 - Easy to handle
 - Compact outdoor installation for protected hops
- Available bands



A Broad Antenna Program

Separately installed antennas

2ft – 12ft



Integrated installation

.5 ft – 6ft m single polarized

1ft – 2ft dual polarized



Marconi LH

Typical applications

- **Fiber substitution**
 - Ring closures of metro & core fiber rings
 - Access to Point of presence
 - Special requirements:
 - lack of right of way
 - difficult terrain
 - short implementation time frame
- **Mobile and fixed backhaul**
 - Used for the Metro network
 - Connecting the access transport network to the core network
- **Communication networks**
 - internal communications, video surveillance and control data
 - for utility, defense, transportation industries
- **TV Broadcasting**
 - Used for broadcasting backhaul

Highest transmission capacity

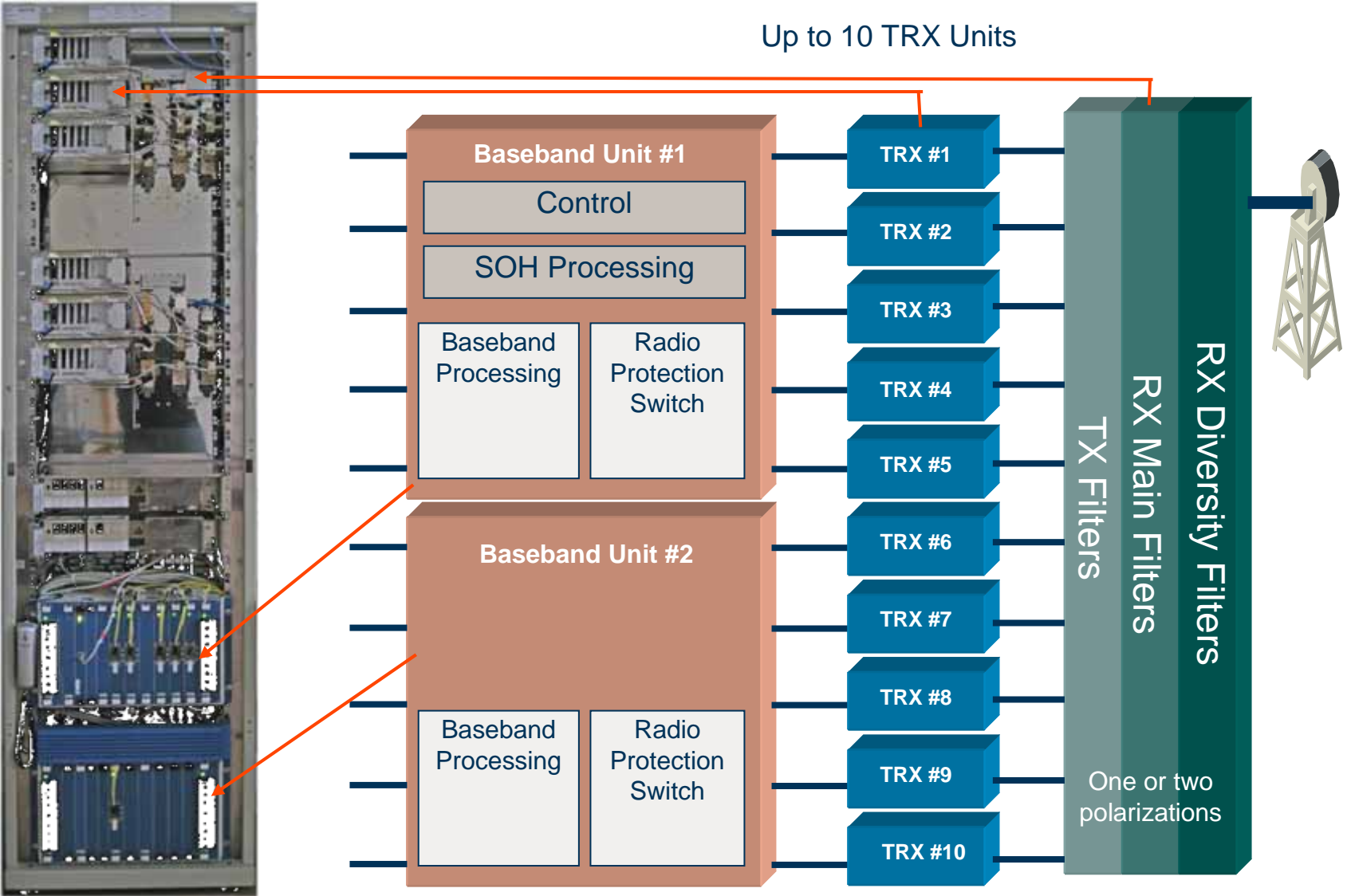
- Small footprint / High capacity
 - 10 x OC-3 per rack / 20 x OC-3 per antenna
- Flexibility
 - Any frequency / any channel arrangement



- Highly reliable system architecture
 - Radio interface protection (up to 2 times 9+1)
 - Network interface protection
 - No single point of failure
- Advanced space diversity for
 - long hops
 - difficult propagation environments
- Typical hop length: 5 – 75 miles
- Best in class power consumption
< 80 W per OC-3



System Architecture



Integrated Microwave/Optical Management

ServiceOn Microwave Element Management System

- Graphical user interface for equipment focussed configuration and data access.
- Consistent look and feel for regardless of the technology or type of equipment.
- Comprehensive FCAPS capabilities
- Real time alarm and event data display
- Performance data monitoring and display
- Software download management
- Support for selected 3rd party equipment
- Support for selected OMS elements
- Proven interfaces to higher level OSS systems

