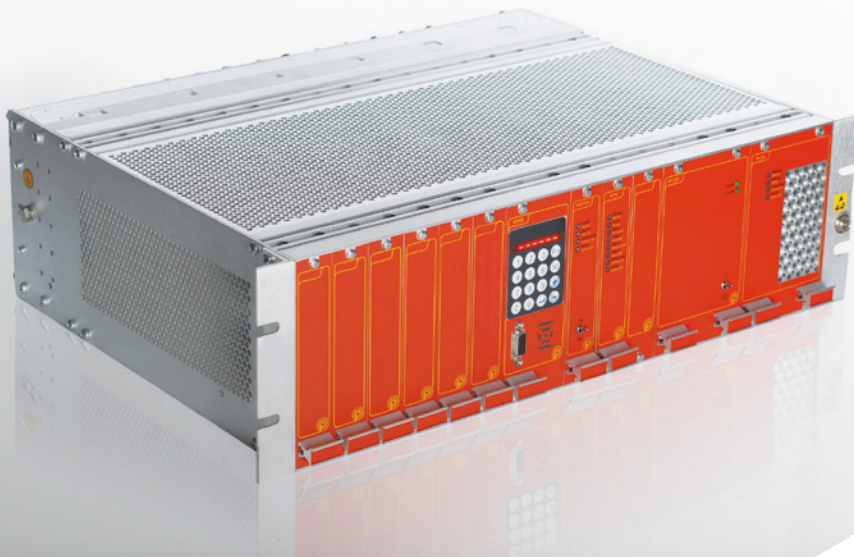


# LEONARDO

## ECOS-D AT A GLANCE



**ECOS-D**  
Digital Extended Communications System

### Experience

- › Over 220 systems in 50+ Countries
- › Over 30 systems in North America

### Multi-mode Technology

- › Analog FM
- › DMR II
- › DMR III
- › P25 Phase 1
- › Dynamic Dual Mode
  - Analog FM/DMR II
  - Analog FM/P25

### System Architectures

- › Single Site
- › Simulcast
- › Multicast
- › Hybrid combination of all

### Trunking Topologies

- › Centralized
- › Distributed
- › Hybrid combination of both

### Radio Base Station (RBS)

- › System 'In a Box'
- › 25 & 110 W models
- › VHF 136 to 174
- › UHF 400 to 470 (25W)
- › UHF 450 to 526 (110W)
- › 800 MHz
- › 900 MHz
- › Rx diversity option
- › AC & DC power options

### Maintainability

- › Compact 3RU structure
- › Modular construction
  - Hot-swappable front modules
  - Replaceable back cards
- › MMI keyboard front mounted
- › Microphone (option) front mounted
- › Remote alarming, diagnostics, & configuration
- › 2 memories in each RBS
- › Native SNMP

### Simulcast

- › "Standard" feature on all RBS
- › "Standard" feature in all modes
- › Equalization in the RBS: automatic, bi-directional
- › Voting in the RBS
- › Synchronization options
  - 1 + 1 GPS in the RBS
  - PTP
  - Pilot tone
  - External reference
  - Priority driven redundancy
- › Resilient & reliable architecture
  - Automatic soft back-up
    - Server/sub-server/client
    - Server/back-up master
    - 8 nesting levels
- › Flexible architectures
  - Star
  - Tree
  - Ring
  - Linear

[Request More Info Here](#)



## Trunking

- › “Standard” feature on all RBS
- › Dedicated control channel
- › Mobility management in the RBS
- › Gateway function in the RBS
- › Site call management in the RBS
- › Resilient & reliable architecture
  - Back-up mobility manager
  - Back-up gateway function
  - Back-up site call management

## Console System

- › Gateway function in the RBS
- › SiP based interface
  - AIS DMRA
  - AISIP Leonardo
- › Successful integrations
  - Avtec
  - Zetron
  - Mindshare
  - TRBOnet
- › PTTToC
  - ESChat

## User Terminals

- › Trends
  - IP architecture, open systems, C.O.T.S.
  - LMR tracking cellular industry
- › Interoperability
  - World leader in IOP/CAP certificates
  - DMRA IOP
  - P25 CAP
- › Leonardo DMR
  - Mobiles
  - Portables
- › DMR II: DMRA IOP
  - Leonardo
  - Hytera
  - Kenwood
  - Motorola
  - Simoco
  - Tait
  - Vertex

- › DMR III: DMRA IOP
  - Leonardo
  - Hytera
  - Motorola
  - Simoco
  - Tait
- › P25 CAP
  - Motorola
  - Harris
  - Tait
  - Kenwood
  - EF Johnson
  - Simoco

## Encryption

- › ARC 40-bit
- › AES 128
- › AES 256

## Network & System Management

- › Network Element Configuration Software (NECOS)
- › ECOS-D Connect
  - Network management system
  - Network health manager
  - Subscriber manager
  - Trunked KPI
  - EPS service analysis
  - Encryption key loader
  - License manager
  - Account manager
  - OTAP

## Service & Support

- › North America HQ in Overland Park, KS
  - Marketing & sales
  - System engineering
  - Program & customer management
  - System integration
    - Staging
    - System build
    - FAT



**10-Year Non-Obsolescence Guarantee**

**5-Year Parts and Labor Warranty**

**Committed to Interoperability  
and Open Standards**

- Customer training
  - Tailored to your system
  - Your place or ours
  - Programs
    - Operations
    - Management
    - Maintenance
    - End user
- Post system acceptance
  - Spare parts inventory
  - Diagnostic repairs
  - System software maintenance
  - Telephone technical support
  - Priority hotline support
  - Remote diagnostics
  - Dispatched services
  - Extended warranty

**Request More Info Here**

