IDAS-340/LMR

IDAS-340/LMR: 378 to 512 MHz Radio (LMR) Repeater System

Expanded In-Building Coverage for 378 to 512 MHz Land Mobile Radio (LMR) Systems for Critical Communications and First Responder Network Traffic Over Distributed Antenna Systems

The IDAS-340/LMR, is a Fiber Optic "In-Building" Transmission System, which provides a novel RF design approach to achieve the operational requirement of providing expanded continuity of critical communications network traffic. The IDAS-340/LMR consists of a suite of hardware elements including a Bi-Directional Amplifier (IDAS-340/BDA), a Central Fiber Donor Unit (IDAS-340/CFDU) and a Remote Fiber Unit(s) (IDAS-340/RFU).

The IDAS-340/LMR utilizes proprietary and field proven Radio Frequency and Fiber Optic technology to transmit and receive the desired spectrum of 378 to 512 MHz trunking radio signal traffic over a Hybrid Fiber Coax structured Distributed Antenna System (DAS). This approach, provides the ability to securely route and distribute LMR signal traffic to mounted antenna locations throughout the communications network infrastructure beyond the limitations of convential coaxial based deployment schemes. The IDAS-340/LMR can be integrated into architectures requiring Point-To-Point or Point-To-Multi-Point topologies supporting user augmentations found within Government Facilities, Hospitals, Schools, Parking Garages, and Public Transit Facilites. The IDAS-340/LMR complements MPS's offering of IDAS systems such as the IDAS-800 Public Safety and the ISAT-7700 Emergency Satellite Telephone System. MPS is a full service design, integration, and test certification contractor offering full specturm in-building distributed antenna solutions.

Information: Call us toll-free at 888-868-8967 or email info@b2bphotonics.com

Market Applications

- Network Operation Centers
- Emergency Response Centers
- Schools & Libraries
- Courthouses & Prisons
- Airports, Rail Road Stations, Bus Terminals
- Hospitals & Police Stations

Features & Options

- Enhanced Signal Filtering
- All Passive Hardware Supports AWS, LTE, iDEN & WiMAX Technologies
- Battery Back Up Options Available
- Front Panel Display of System Status
- Remote Status Monitor and Control
- 2 Year Warranty

Deployment Schemes

- Distributed Antenna Systems
  - -- Point to Point : Single or Multi-User
  - -- Point to Multi-Point: Single or Multi-User

Packaging Options

- Wall Mount
- Rack Mount
- Indoor or Outdoor Roof Top
- Portable Transit Case for Emergency Response Scenarios

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Specifications

Optical Parameters

Optical Wavelength:	1310 nm , 1550 nm or CWDM available
Optical Output Power:	4 mW (typical)
Optical Connector:	FC/APC , SC/APC, or E2000 APC
Max Optical Reflections:	< - 55 dBm
Fiber Optic Cable Type:	Single Mode, 9/125 um
Optical Link Budget:	up to 10 dBo

RF Parameters

Primary Frequency Range (Option A):	378 to 430 MHz (UHF Lower)
Primary Frequency Range (Option B):	450 to 512 MHz (UHF Upper)
Additional Frequency Ranges:	Customer Specified VHF or Other Radio Bands
Rejection:	+35 dBc (typical) @ +/- 4MHz from Passband
Gain:	80 dB (min)
Gain Flatness:	+/- 1.5 dB (max)
Noise Figure:	5.0 dB (max) ; 4.5 dB (typical)
Attenuation Range:	0 - 30 dB in 2dB increments
Power Output @ 1dB Compression:	Uplink: +34.0 dBm (typical) Downlink: +44.0 dBm (typical)
Output Power ALC Set:	Uplink: +27 dBm (typical) Downlink: +37 dBm (typical)
Output Composite Power:	Uplink: +27 dBm (typical) Downlink: +37 dBm (typical
Output 3rd Order Intercept:	)Uplink: +47 dBm (typical) , 2 tones @ +20 dBm Downlink: +55 dBm (typical) , 2 tones @ +31 dBm
Impedance (Input / Output):	50 Ohms
VSWR (Input / Output):	1.5:1
RF Connector (Input / Output):	N-Female

Additional Specifications

AC PWR Input:	Auto Ranging, 120 VAC, 60 Hz, Single Phase
DC Input Voltage:	+24 to +27 VDC, -48 VDC Optional
Unit Power Consumption (AC/DV):	< 100 VA
AC Receptacle:	IEC 320
Storage Temperature:	-20°C to +80°C
Operating Temperature:	-10°C to +50°C
Status & Control:	RS-232, RS-485 or Ethernet Options
Battery Backup:	2 , 4 and 8 Hour Options Available
Dimensions & Weight: Wall Mount	14" x 18" x 6" & 25 lbs (US)

Note*

RF Specifications listed are typical. Actual values shall be optimized for in-building coverage.

IDAS-340/CFDU
Central Fiber Donor Unit

IDAS-340/RFU
Remote Fiber Unit

IDAS-340/BDA
Bi-Directional Amplifier

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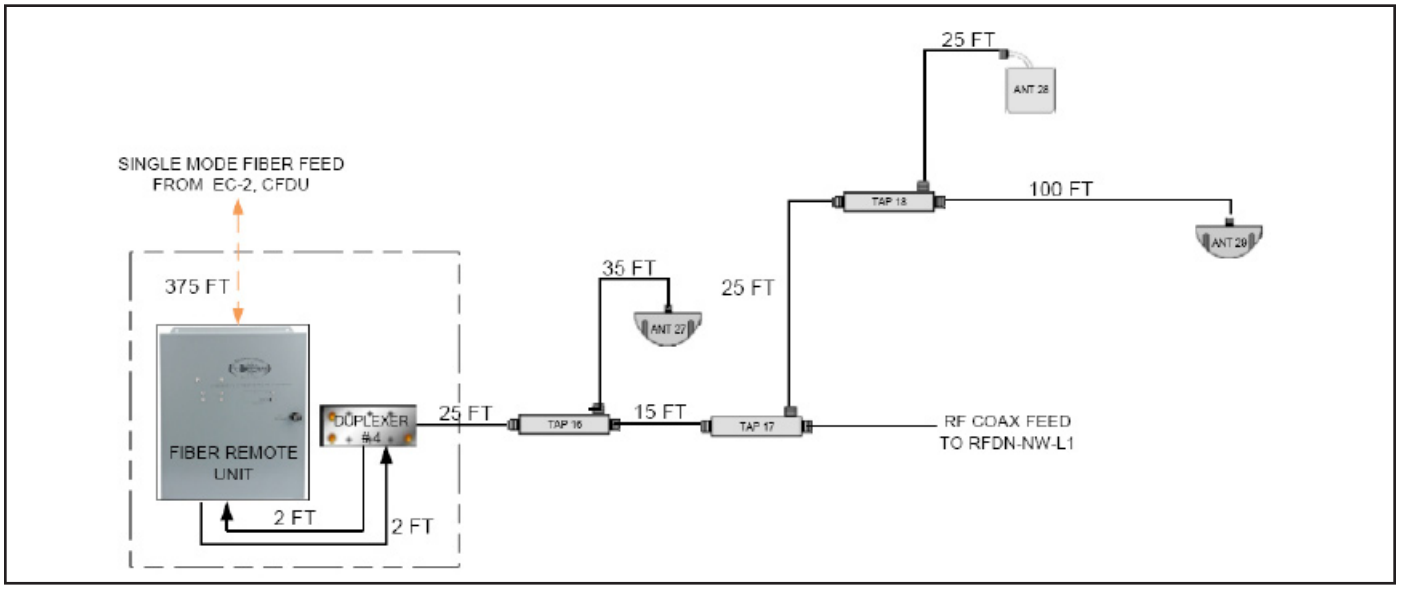
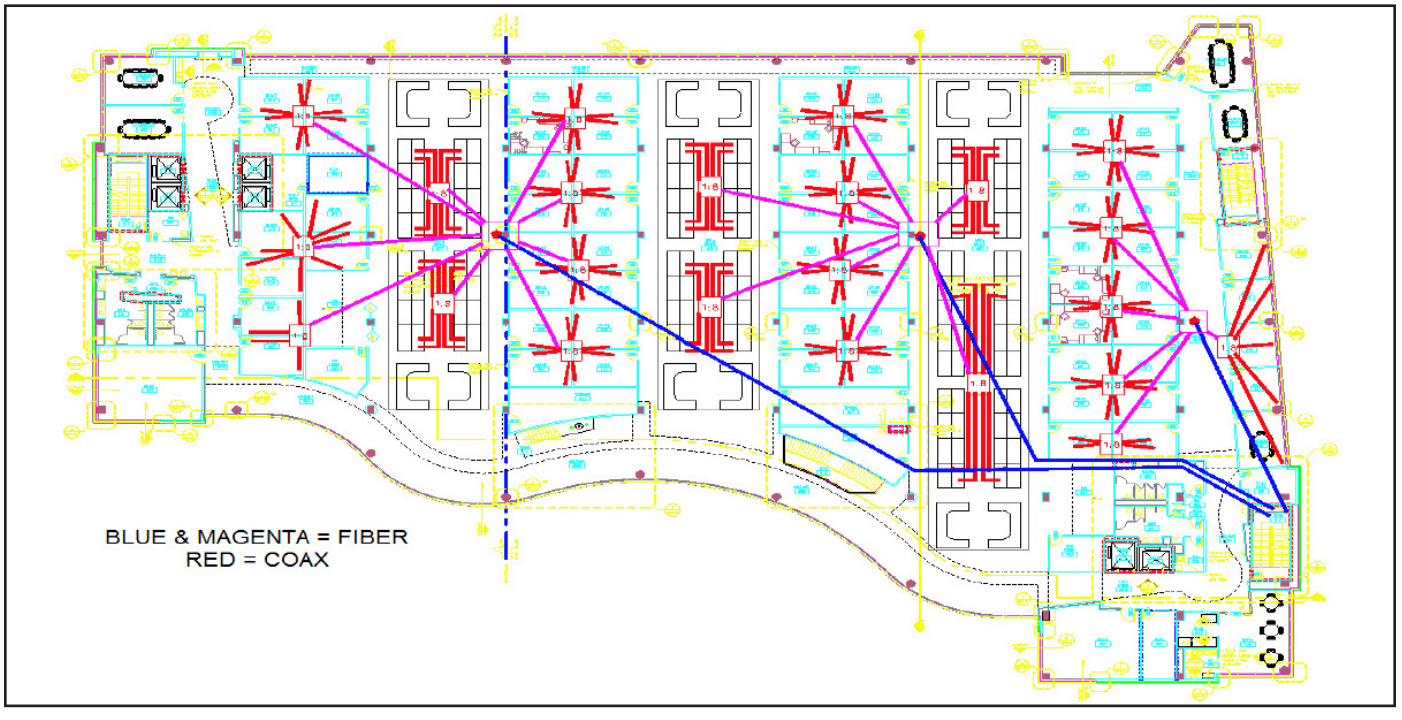
Functional Block Diagram: Hybrid Fiber Coax Distributed Antenna System (example)



Depolyed Site Overlay: Hybrid Fiber Coax Distributed Antenna System (example)



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