

GENERAL SPECIFICATIONS

ALLIANCE BIU (BASE-STATION INTERFACE UNIT)

Size: 19"W x 8.75"H x 17.7"D (5U)
 Weight: 49lbs. Loaded with all modules
 Operating Temperature: 14° to 122° F
 Power Input: -48VDC / 12A at start / 7A continuous.
 With (4) ODU's powered – 200W Max
 RF Input Range: -10dBm to +20dBm
 Craft Port RS-232 for local laptop connection to provided SOLiD GUI
 RJ-45 Ethernet Port IP connection for local laptop, remote IP connection or DMS Connection.

Standard Capabilities:

(4) open MDBU slots
 CPU card with RS-232 and Ethernet
 Active backplane with built-in rigid jumpers
 UHF/VHF simplex inputs
 All RF connections are on the back of the BIU
 Programmable dry contact alarm points
 Hot swappable MDBU modules

ALLIANCE ODU (OPTICAL DISTRIBUTION UNIT)

Size: 19"W x 1.75"H x 17.7"D (1U)
 Weight: 12.5lbs. Loaded with 2 modules
 Operating Temperature: 14° to 122° F
 Power Input: -48VDC provided by BIU (26W Fully Loaded)
 Signal Input: Tx/Rx jumpers from BIU (Provided by SOLiD)
 Fiber Link Budget: 5dB0 for single-mode or multi-mode fiber

Standard Capabilities:

Qty (2) Optical Card Slots
 Each card provides: (4) Optical connections

ALLIANCE ROU (REMOTE OPTICAL UNIT)

Size: 19"W x 20.8"H x 10.16"D (12U)
 Weight: 78lbs. Loaded with all modules
 Power Input: -48VDC or 110VAC
 Signal Input: Single strand of fiber from ODU/OEU
 RF Signal Output: Single N-Female port
 UHF/VHF RF Signal Output: Simplex SMA-Female
 Craft Port RS-232 for local laptop connection to provided SOLiD GUI

Standard Capabilities:

NEMA 4X rating
 UL Labeled with internal power supply
 CPU card with RS-232 connection
 Up to (6) amplifiers populated internally
 Additional growth to (12) amplifiers
 Double keyed locks on ROU cabinet

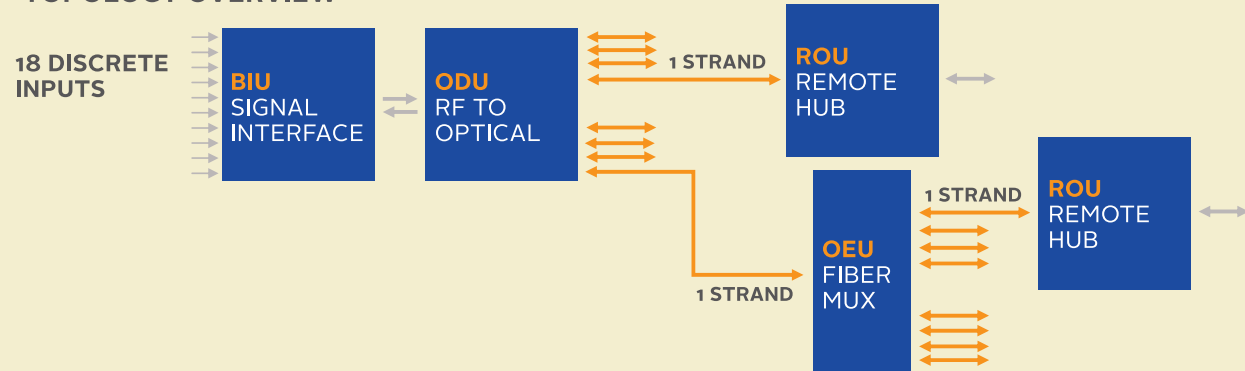
ALLIANCE OEU (OPTICAL EXPANSION UNIT)

Size: 19"W x 3.5"H x 17.7"D (2U)
 Weight: 20.5 lbs
 Power Input: -48VDC, 45W, 4.5A
 Signal Input: Single strand of fiber from ODU
 Fiber Link Budget: 5dB0 for single-mode or multi-mode fiber

Standard Capabilities:

Qty (2) Optical Card Slots
 Each card provides (4) Optical connections
 Up to (4) OEUs per BIU/Sector

TOPOLOGY OVERVIEW



For more information or complete technical specifications, please visit our website or contact us via email or phone.



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ISO9001
 CERTIFIED

ISO14001

SOLiD TECHNOLOGIES ALLIANCE™ MULTI-CARRIER DAS



FEATURES

GUARANTEED RF POWER CONTROL
 Carriers can lock-in power level as designed

4G CERTIFIED
 MIMO in any band

NFPA 72 COMPLIANT
 Meets latest fire code equipment requirements

NEMA 4X CERTIFIED
 Perfect solution for harsh environment installations

UL LABELED
 Only system fully certified with internal power supply

UHF/VHF STANDARD
 One system delivers 150MHz to 3GHz

QUALITY CHECKED
 Test results provided for each component, systems fully bench tested

BENEFITS

LOWER DAS EQUIPMENT COSTS
 Higher efficiency results in fewer system components

LOWER OPERATIONAL COSTS
 Rugged design with no moving parts

3 YEAR STANDARD WARRANTY
 Optional Lifetime Warranty

FIBER EFFICIENCY
 Typically one strand of fiber to connect a building

EASY TO PLACE EQUIPMENT
 NEMA rating and rack-mounting provide maximum flexibility

PRE-CONFIGURATION
 Each systems is pre-configured and labeled to simplify installation

SOLiD ALLIANCE™ MULTI-CARRIER DAS DELIVERS PUBLIC SAFETY COMMUNICATIONS, 2-WAY RADIO, AND COMMERCIAL WIRELESS SERVICES WITH UNPARALLELED RF PERFORMANCE, COST EFFICIENCY, AND FLEXIBILITY FOR THE FUTURE.



THE SOLiD ALLIANCE DAS IS BROADBAND AND PROTOCOL INDEPENDENT. PUBLIC SAFETY, 2-WAY RADIO, PAGING, 2G/3G CELLULAR, AND 4G LTE SERVICES ARE DELIVERED OVER A SINGLE FIBER.



ALLIANCE BIU (BASE-STATION INTERFACE UNIT)



The BIU is the central input point(head-end)for all signals delivered over the DAS. Each signal input is independently filtered, attenuated, and controlled.



FEATURES:

- Unique Guaranteed RF Power Control for each input
- Completely modular and hot swappable
- Utilizes advanced SAW filtering
- Ethernet port for DAS management
- Discrete RF inputs per carrier per band

BENEFITS:

- Add frequency bands without adding equipment
- Modular head end decreases complexity and reduces maintenance costs
- Stacks easily to decrease expansion costs

ALLIANCE DMS (DAS MANAGEMENT SYSTEM)



The DMS is the alarming, diagnostic, and control interface for a SOLiD DAS. The DMS provides network intelligence for comprehensive DAS management.

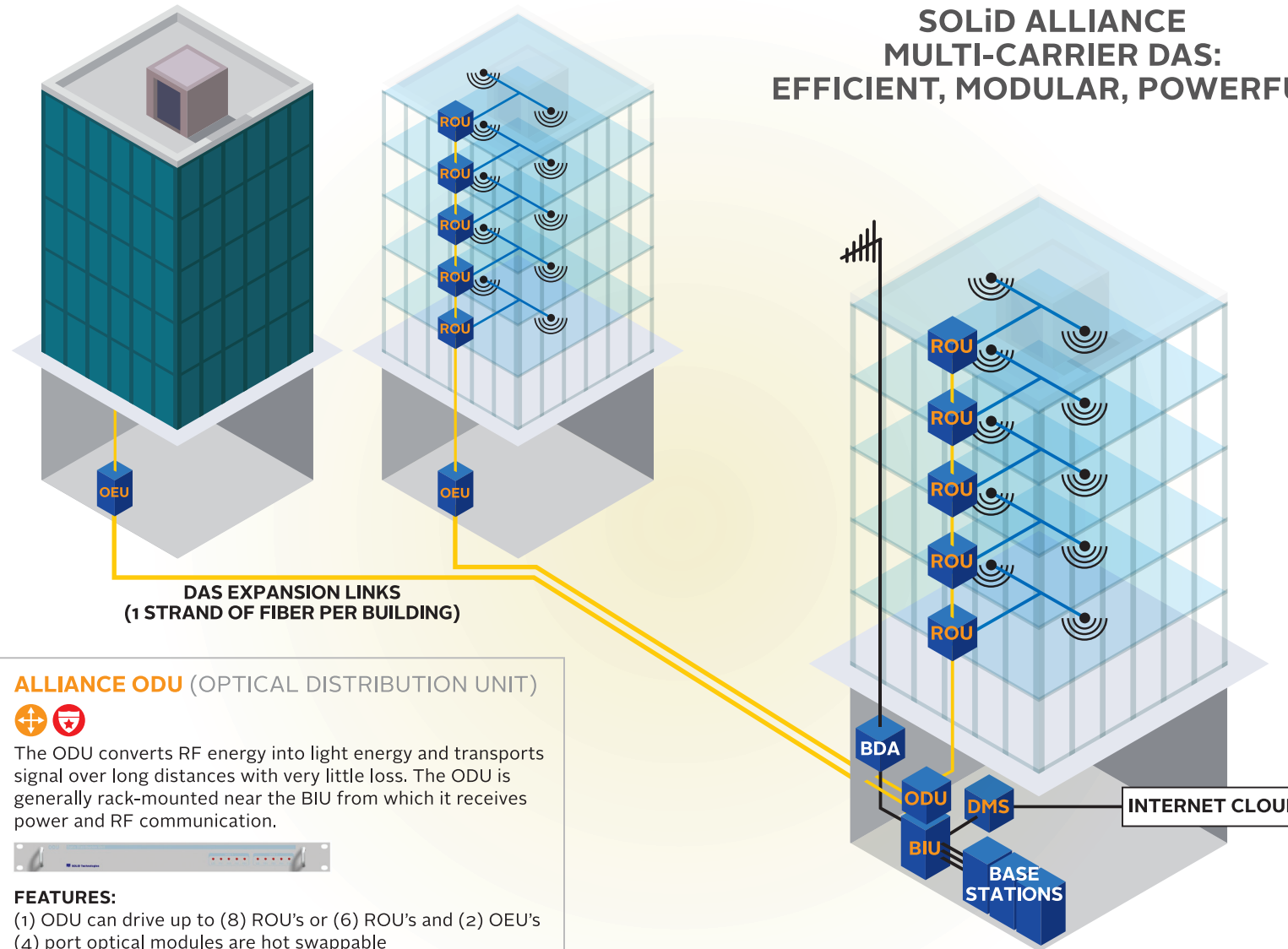


FEATURES

- Web-based real-time DAS status
- Allows remote command & control
- Each DMS can manage (16) sectors
- Alarm notification via SNMP traps
- Programmable dry contacts
- Supports multiple NOCS

BENEFITS

- Improved customer service
- Expedites issue resolution
- Eliminates unnecessary truck rolls



ALLIANCE ODU (OPTICAL DISTRIBUTION UNIT)



The ODU converts RF energy into light energy and transports signal over long distances with very little loss. The ODU is generally rack-mounted near the BIU from which it receives power and RF communication.



FEATURES:

- (1) ODU can drive up to (8) ROU's or (6) ROU's and (2) OEU's
- (4) port optical modules are hot swappable

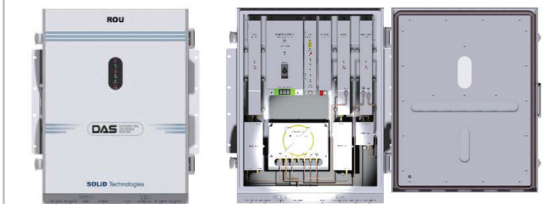
BENEFITS:

- Reduces the fiber needed to connect a remote to (1) fiber strand
- Expands from (4) to (8) ROU's by adding just (1) optic module

ALLIANCE ROU (REMOTE OPTICAL UNIT)



The Remote Optical Unit (ROU) receives signals through an optical interface, distributes those signals to independent amplifiers, then combines the RF into one output port.



FEATURES

- Each ROU location can support (2) to (12) frequency bands
- Double-locking tamper proof design
- Mounts on wall, 19" rack, indoor or outdoor
- Internal 110VAC or -48VDC power supply
- Accommodates SISO / MIMO / Public Safety Configurations

BENEFITS

- High output power reduces total number of ROU's required
- Small footprint and NEMA rating provide flexibility in equipment placement
- Convection cooling eliminates fans that fail or require maintenance

ALLIANCE OEU (OPTICAL EXPANSION UNIT)



The OEU is an optical multiplexing device used to efficiently extend the DAS from one building to many others.



FEATURES:

- Each OEU can support up to (8) ROU's
- A single sector (1 BIU) can support up to (4) OEU's
- Each OEU requires only (1) ODU port and (1) fiber strand

BENEFITS:

- Significant reduction in equipment required to serve multiple buildings
- Saves space and power requirements in remote buildings



RF FILTERING

Surface Acoustic Wave (SAW) Filters in the BIU and ROU work with Cavity Filters in each ROU to improve RF performance, overcome thermal noise, and prevent frequency intermodulation.



MODULARITY

In a SOLiD ALLIANCE DAS, every component is designed to simply slide into place without external boxes or complex cabling. Additionally, each critical RF component can be hot-swapped to maintain maximum system uptime.



ENVIRONMENT

The SOLiD ALLIANCE DAS system incorporates the latest amplifier technology and a uniquely ruggedized design that allows our solutions to be installed in harsh environments that are wet, dusty, or highly trafficked. The ALLIANCE remote units (ROUs) utilize no fans for cooling and hold a NEMA 4X water tight designation making them a great candidate for most mission critical wireless applications.



SYSTEM SECURITY

SOLiD ALLIANCE remote units feature double locking cabinets with no external parts. The DAS Management System (DMS) provides a high degree of physical tamper proofing and authentication for system access.



PUBLIC SAFETY

The SOLiD ALLIANCE Multi-Carrier DAS is uniquely designed to provide public safety radio, 2-way radio, and commercial wireless services on one system. It is the only DAS that supports all frequencies in the U.S. as standard and it is the ONLY DAS that meets the NFPA and IFC codes for environmental survival.

