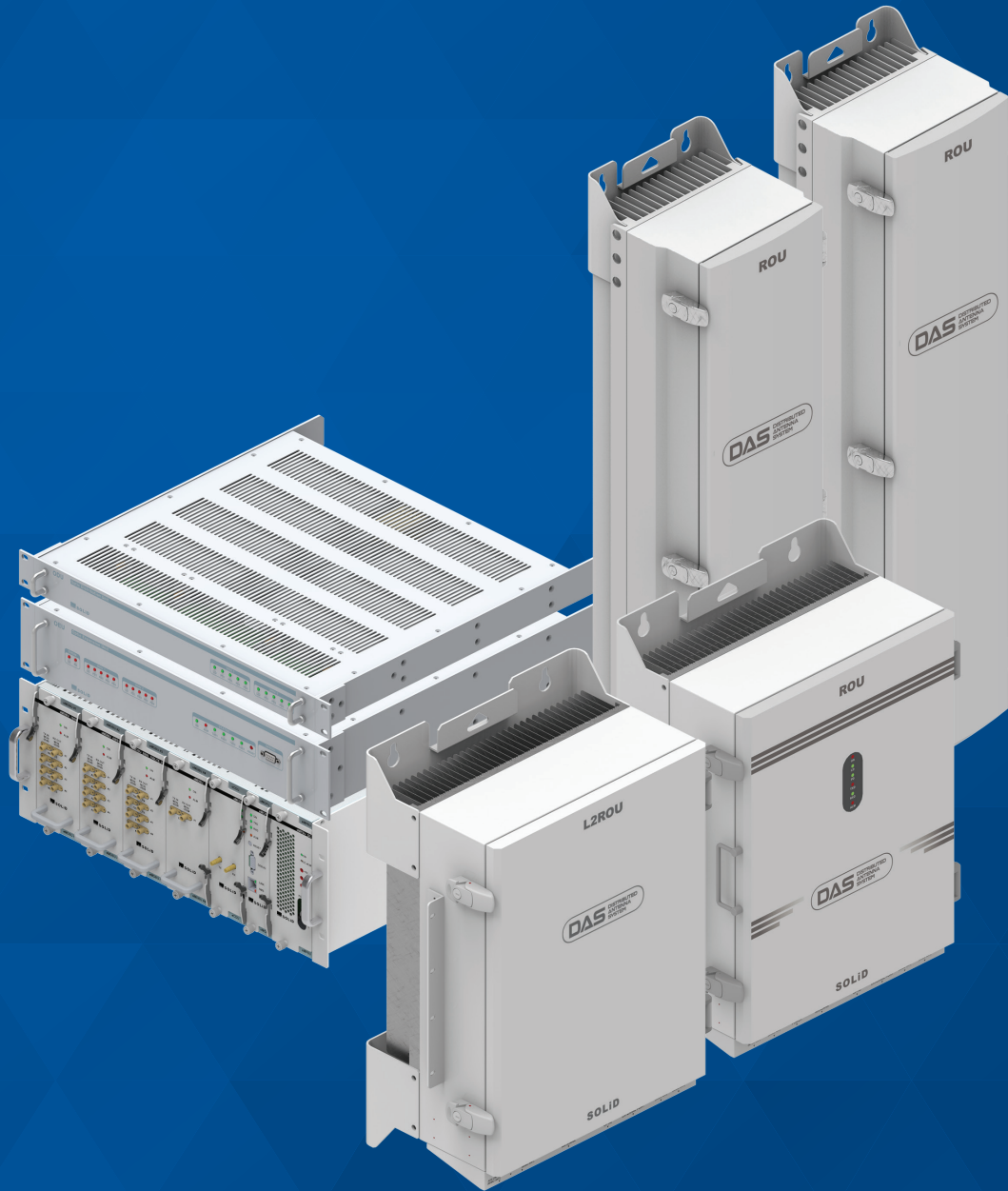# SOLiD ALLIANCE

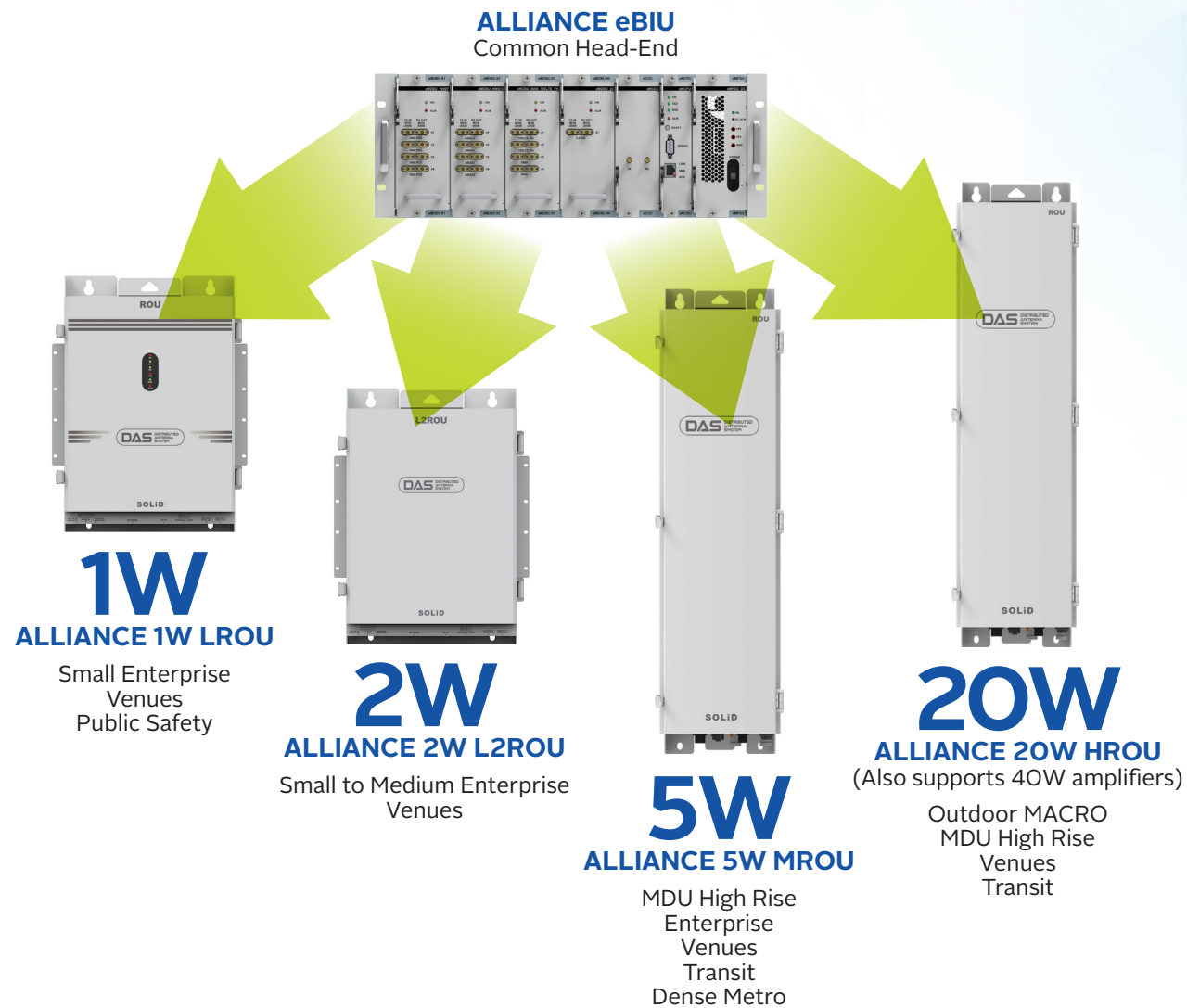## INTEGRATED 1W, 2W, 5W, 20W AND 4OW COVERAGE AND CAPACITY

A modular, multi-operator DAS solution that supports public safety communications, 2-way radio, and commercial wireless services — all delivered over a single fiber and common head-end.

SOLiD
solid.com

SOLiD ALLIANCE
LOW, MEDIUM, OR HIGH POWER: FOR DAS CAPACITY AND COVERAGE, WE'VE GOT YOUR WATTS.

ALLIANCE eBIU
Common Head-End

1W
ALLIANCE 1W LROU
Small Enterprise
Venues
Public Safety

2W
ALLIANCE 2W L2ROU
Small to Medium Enterprise
Venues

5W
ALLIANCE 5W MROU
MDU High Rise
Enterprise
Venues
Transit
Dense Metro

20W
ALLIANCE 20W HROU
(Also supports 40W amplifiers)
Outdoor MACRO
MDU High Rise
Venues
Transit

The ALLIANCE platform is SOLiD's multi-operator, neutral host Distributed Antenna System (DAS), which efficiently delivers wireless RF signals into buildings, campus environments, stadiums, airports, or any location that is traditionally difficult to cover with outdoor macro wireless networks.

ALLIANCE DAS supports a broadband frequency range from 150MHz to 3GHz to provide coverage for public safety communications, 2-way radio, and commercial wireless service providers.

SOLiD ALLIANCE 1W, 2W, 5W, 20W and 40W DAS systems are built utilizing SOLiD components and amplifiers that are engineered to work together seamlessly. This leads to more flexibility with design, deployments that save power and space, and reduces the total cost of ownership.

SOLiD ALLIANCE MULTI-CARRIER DAS
EFFICIENT, MODULAR, POWERFUL

5W-MROU   20W-HROU

1W-LROU   2W-L2ROU

ALLIANCE eBIU
(ENHANCED BASE STATION INTERFACE UNIT)
The eBIU is the central input point (head-end) for all signals delivered over the DAS. Each signal input is independently filtered, attenuated, and controlled.

FEATURES:
Integrated Point of Interface (POI) modules for conditioning downlink and uplink signals
Guaranteed RF Power Control for each input
Discrete RF inputs per carrier per band
Utilizes advanced SAW filtering
BENEFITS:
Integrated POIs reduce need for external DAS tray
Modular design decreases complexity and costs
Add frequency bands without adding equipment
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 20 sectors
Alarm notification via SNMP traps
Programmable dry contacts
Supports multiple NOCS
BENEFITS
Improved customer service
Expedites issue resolution
Eliminates unnecessary truck rolls
Command and control functionality for remote modifications and support

ALLIANCE ODU (OPTICAL DISTRIBUTION UNIT)
The ODU performs RF to optical conversion and transports these signals over long distances while minimizing loss. The ODU is co-located with 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.
Optical modules (either 4-port or 1-port) are hot swappable.
BENEFITS:
Only (1) fiber strand is required to connect each remote.
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
Available 1W, 2W, 5W, and 20W ROUs can be mixed and matched, and integrated with a common head-end
20W remote also supports 40W amplifiers
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
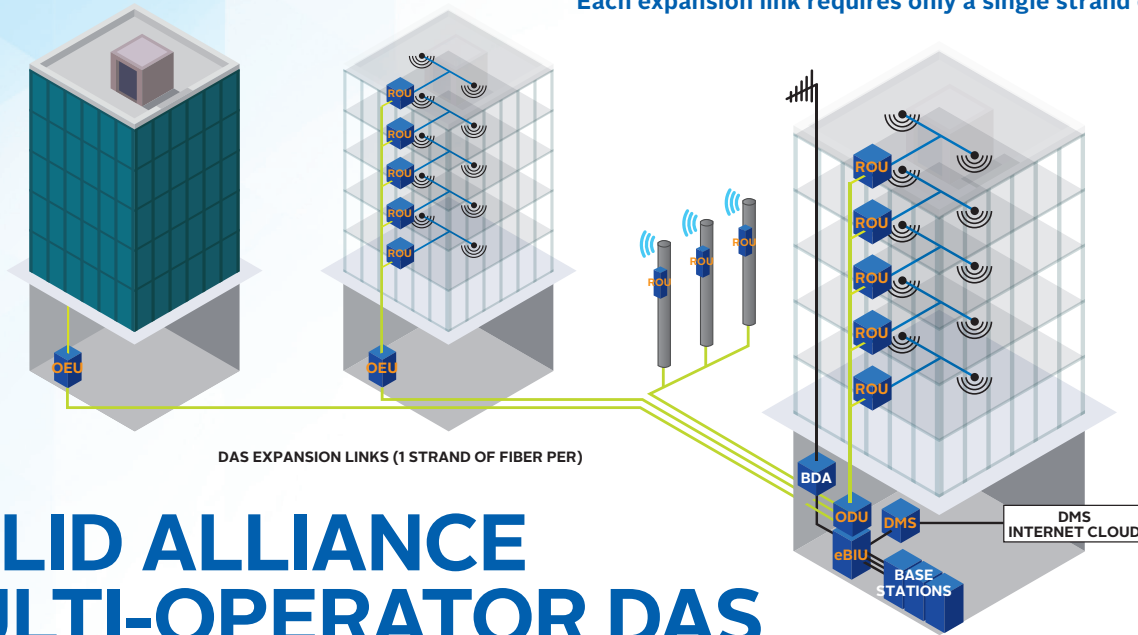Convection cooling eliminates fans that fail or require maintenance

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
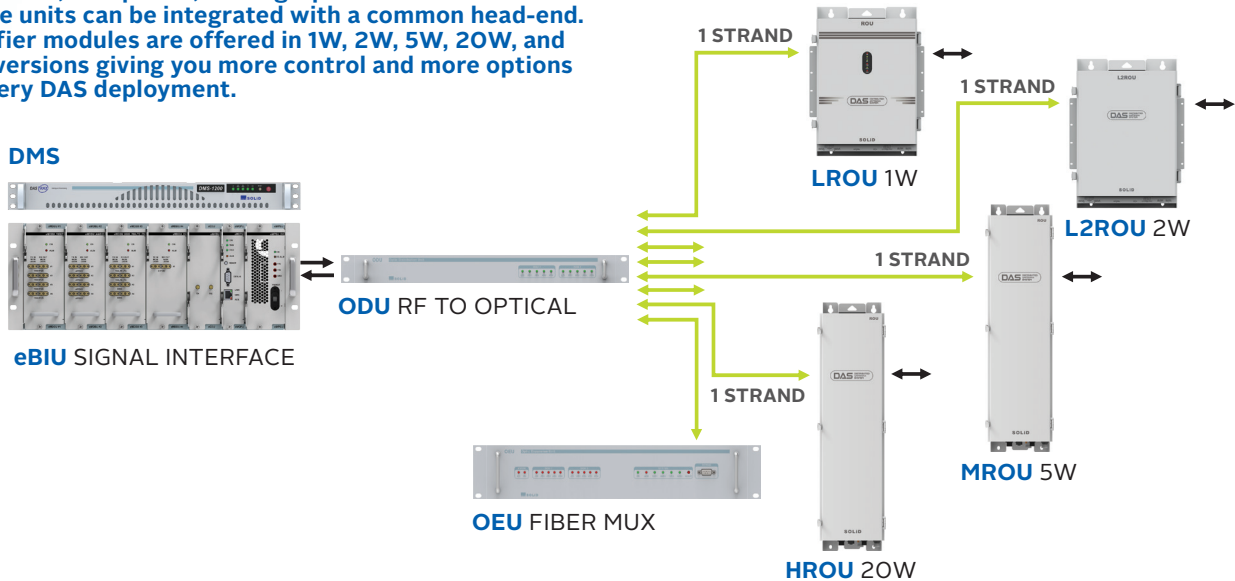Saves space and power requirements in remote buildings

ALLIANCE DAS can be efficiently expanded from one building to many others using SOLiD OEU optical multiplexing devices. Each expansion link requires only a single strand of fiber.

DAS EXPANSION LINKS (1 STRAND OF FIBER PER)

ROU
OEU
BDA
ODU
DMS
eBIU
BASE STATIONS
DMS INTERNET CLOUD

SOLID ALLIANCE MULTI-OPERATOR DAS TOPOLOGY OVERVIEW

Low-power, mid-power, and high-power NEMA-rated remote units can be integrated with a common head-end. Amplifier modules are offered in 1W, 2W, 5W, 20W, and 40W versions giving you more control and more options for every DAS deployment.

DMS

eBIU SIGNAL INTERFACE

ODU RF TO OPTICAL

1 STRAND
LROU 1W

1 STRAND
L2ROU 2W

1 STRAND
MROU 5W

1 STRAND
HROU 20W

OEU FIBER MUX

Connect with SOLiD

SOLiD helps people stay connected and safe in a rapidly-changing world through a portfolio of RF Amplifier, RF Radio and Optical Transport solutions. SOLiD enables indoor and outdoor cellular and public-safety communications at some of the world's best-known and most challenging venues including leading hospitals; professional and college sports venues; government, university and Fortune 500 corporate buildings and campuses; international airports and metropolitan subways.

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SOLiD

TL9000 H,V: R5.5/R5.0   ISO9001 CERTIFIED   ISO14001

UL   NEMA   NFPA   IFC®   APCO International — Leaders in Public Safety Communications