



SOLID

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Simple | Easy | Flexible | SOLiD

# SOLiD GENESIS™ DAS

**The most advanced, flexible, easy to deploy  
DAS available.**

SOLiD GENESIS DAS is a new wireless coverage platform, designed to meet the evolving requirements of all venues as well as the emerging MIDDLEPRISE market.

The GENESIS approach incorporates innovative software and hardware features that simplify installation and configuration, delivers 100% user control, and increases flexibility for all verticals and applications.



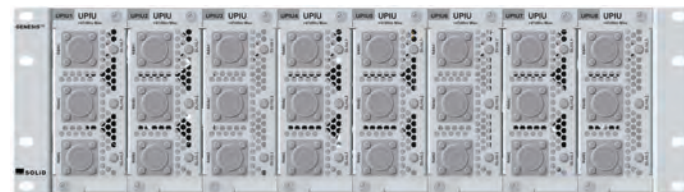
Over the past few decades the wireless industry has turned to distributed antenna systems to meet the growing demand. DAS is a proven solution, reliably delivering both coverage and capacity in stadiums, subways, airports, Tier one venues where the macro network falls short. Unfortunately, for the millions of SQFT of commercial buildings that make up the MIDDLEPRISE, the complexity and economics of traditional DAS technology, is not an option.

CRE buildings are adopting technology to keep pace with increasing tenant expectations and to drive building efficiencies. Inbuilding wireless is a natural plug in to this technology revolution. However, the property tech revolution has evolved traditional inbuilding coverage requirements.

SOLiD's GENESIS is a perfect fit. With enhanced software functionality designed to lower labor cost and leverage remote configuration and commissioning combined with a standards based, structured cabling infrastructure, SOLiD's approach fits seamlessly with today's CRE enterprise requirements.

# SOLiD GENESIS DAS

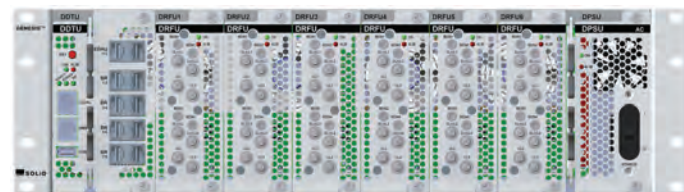
## UPOI Universal Point of Interface



### Functions & Features

- Passive, low PIM attenuator
- Wideband module supports 600-3800 MHz
- Number of ports matches the number of ports in the DAU

## DAU Distribution & Aggregation Unit



### Functions & Features

- Interfaces with 1 to 24 signal source inputs using wideband modules
- Each DAU supports up to 512 remotes across up to 8 sectors
- Supports two expansion DAUs, local or remote, for more sectors
- Commissioning and management through embedded, intuitive user interface

## DRFU Distribution RF Unit

### Functions & Features

- Interfaces with four signal sources, simplex or duplex inputs
- Each input port independent from other ports
- Input ports support any combination of bands within the range of the DRFU
- Three wideband modules to support 600 – 2700 MHz



## HOU Hub Optical Unit



### Functions & Features

- Provides data for up to 32 LRNs
- Daisy chain up to two HOUs per branch
- Modular power supply provides power to eight LRN remotes
- Power to each remote is controlled and monitored
- Meets NEC Class 2

## DCU Decode Unit



### Functions & Features

- Decodes channel and system information
- Wireless operator, Sector ID, and reference power (CPICH, RSRP, etc)
- Decode LTE (FDD or TDD), UMTS, CDMA
- System may be commissioned remotely using decoded Information

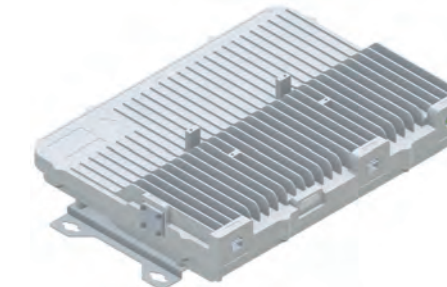
## EPSU Expansion Power Supply Unit



### Functions & Features

- Provides power to as many as 24 LRN remotes
- Each modular power supply supports eight LRN remotes
- Power to each remote is controlled and monitored
- Meets NEC Class 2

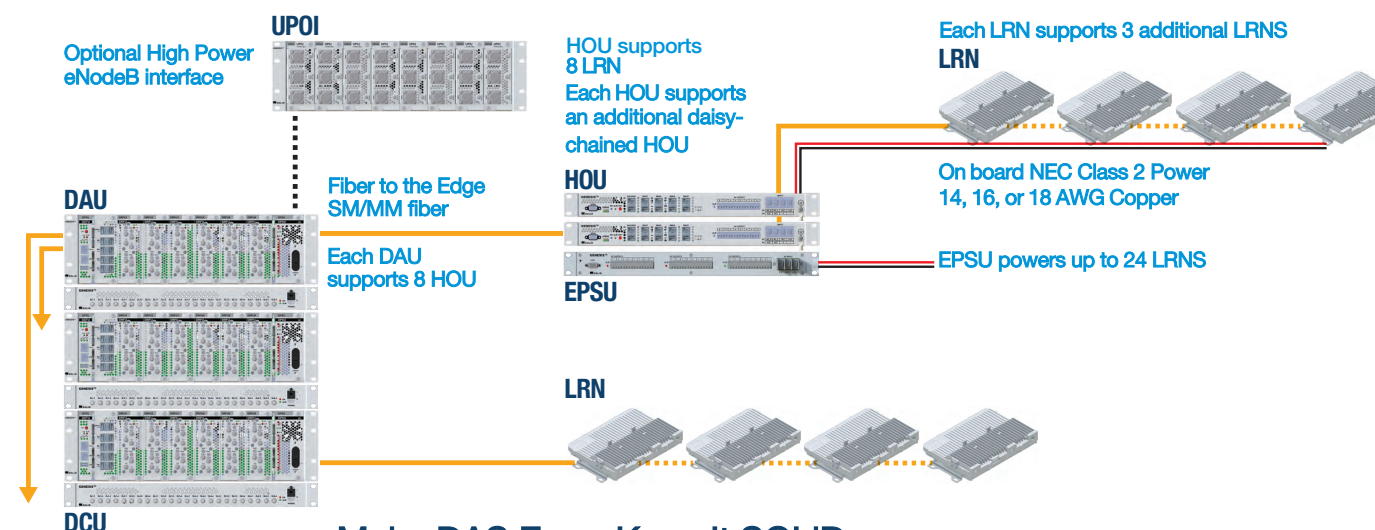
## LRN Low Power Remote Node



### Functions & Features

- Supports six frequency bands 600 – 3800 MHz
- Flexible architecture supports future frequencies beyond current range.
- Compatible with multimode or single mode optical fiber
- External antenna port(s) allows optimum antenna to be used
- SISO and MIMO options may be supported
- Daisy chain up to four remotes per branch
- May be installed indoor or outdoor
- Easy above ceiling or surface mount installation

## Flexible Fiber to the Edge Architecture

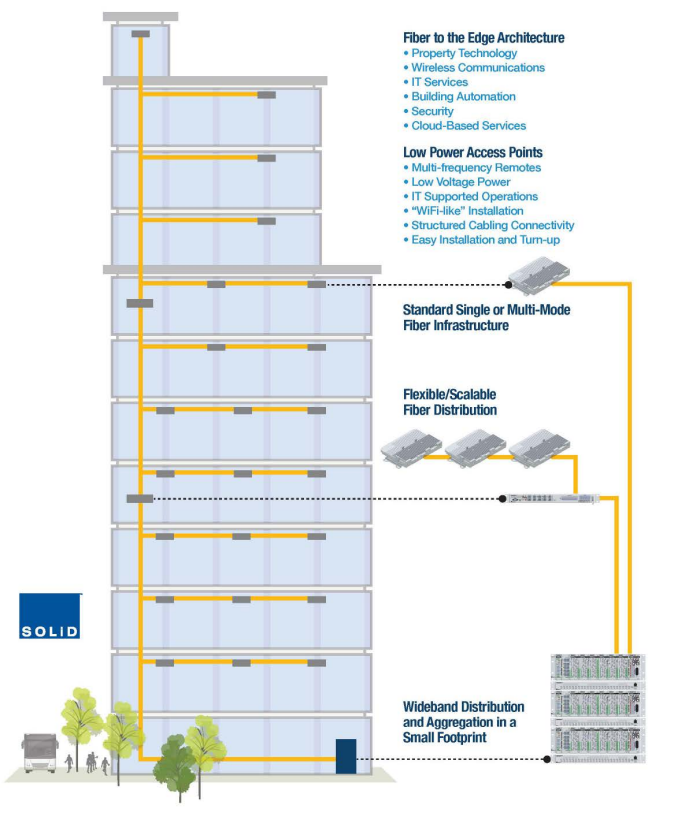


### Make DAS Easy, Keep It SOLiD.

The GENESIS approach is clear. Create a single platform that is easier to install, with simple to use tools to commission and manage the network yet powerful enough to meet the demands of the most challenging wireless coverage environments. In short, Make it SOLiD.

### Software Driven - Enhanced User Experience

GENESIS provides a new level of embedded wireless expertise and remote operational control via a simple and intuitive drag and drop GUI that includes: Signal Decoding, Spectrum Analyzer, Sector Management.



MIDDLEPRISE properties are deploying standards-based, wireless technology to increase property value, building efficiency and tenant satisfaction.

# Specifications: GENESIS Rack Mount Wireless Networking Equipment

## MECHANICAL SPECIFICATIONS

Item	# of Cards	# of Ports	Dimensions (W x H x D)	Weight
DCU_AC	card	24 QMA	19" x 1U x 420 mm	3.0 kg
DAU_SUBRACK_AC	6	8 SFP+	19" x 3U x 475 mm	9.0 kg
DRFU_BLK	card	n/a	48.5 X 131.5 X 413.7 mm	0.5 kg
DRFU_LOW	card	8 QMA, simplex/duplex	48.5 X 131.5 X 413.7 mm	1.4 kg
DRFU_MID	card	8 QMA, simplex/duplex	48.5 X 131.5 X 413.7 mm	1.4 kg
DRFU_HIGH	card	8 QMA, simplex/duplex	48.5 X 131.5 X 413.7 mm	1.4 kg
DRFU_3500	card	8 QMA, simplex/duplex	48.5 X 131.5 X 413.7 mm	1.4 kg
UPOI_SR	8	n/a	19" x 3U x 475mm	6.2 kg
UPIU	card	4 QMA / 4.3-10, simplex	53 X 131.5 X 376 mm	3.1 kg
UPIU_BLK	card	n/a	53 X 131.5 X 18.4 mm	0.5 kg
HOU_SR_AC	card	8 SFP+, 8 power	19" x 1U x 429 mm	5.0 kg
EPSU_SR_AC	3	24 power	19" x 1U x 440 mm	4.2 kg
HOPSU_AC	card	n/a	127X 41.6 X 380 mm	1.9 kg
HOPSU_BLK	card	n/a	127 X 41.6 X 2.2 mm	0.5 kg

## ELECTRICAL SPECIFICATIONS

Item	Voltage	Power Consumption	Power Connectors	EMC
DCU_AC	90 – 264VAC	15W	IEC C14	Class A
DAU_SUBRACK_AC	90 – 264VAC	100W	IEC C14	Class A
DRFU_LOW	powered by DAU	45W	n/a	n/a
DRFU_MID	powered by DAU	45W	n/a	n/a
DRFU_HIGH	powered by DAU	45W	n/a	n/a
DRFU_3500	powered by DAU	45W	n/a	n/a
UPOI_SR	powered by DAU	25W (Fan RPM 50%)	IEC C14	Class A
UPIU	n/a	n/a	n/a	n/a
HOU_SR_AC	90 – 264VAC	50W + 115W /LRN, max.	Terminal Strip	Class B
EPSU_SR_AC	90 – 264VAC	115W /LRN, max.	Terminal Strip	Class B

## WIRELESS SPECIFICATIONS

Item	Frequency	RF Input	Other
DCU_AC	600 – 3800 MHz	-4 to -45 dBm	
DRFU_LOW	600 – 960 MHz	0 to +26 dBm	UL Out: -15 dBm, max.
DRFU_MID	1700 – 2200 MHz	0 to +26 dBm	UL Out: -15 dBm, max.
DRFU_HIGH	2300 – 2690 MHz	0 to +26 dBm	UL Out: -15 dBm, max.
DRFU_3500	3550 - 3700 MHz	0 to +26 dBm	UL Out: -15 dBm, max.
UPIU	600 – 3800 MHz	+47 dBm, max.	Atten.: 20 ± 2 dB, PIM<-153 dBc @2x20W

## GENERAL SPECIFICATIONS

**Safety:** NRTL certified; **Operating Temperature:** 5 to +45 °C; **Cooling:** Forced air flow, front to rear

# Specifications: GENESIS LRN Low Power Remote Nodes

## GENERAL SPECIFICATIONS

Size	390 x 300 x 78 mm
Weight	7.6 kg
Voltage	29 – 58 VDC
Mounting	Wall or ceiling
Power	79W
Cooling	Convection
Operating Temperature	-25 to +45 °C

Power Connector	Terminal block
RF Connector	NEX10
Data Connector	SFP+ frame
Ingress Protection	IP20, IP66 with optional kit
EMC	FCC Part15 Class B, CISPR Class B
Safety	NRTL certified, UL2043
Radiated	FCC, IC

## WIRELESS SPECIFICATIONS

Number of Bands	6
Bandwidth	≤75 MHz within 600 – 3700 MHz
Output Power	+15 dBm, <1000 MHz
(at single antenna port)	+20 dBm, >1700 MHz, except 2300 MHz +17 dBm 2300 MHz

Noise Figure	16 dB, max
IIP3	-7.5 dBm for -55 dBc @ -15 dBm out
VSWR	1.5:1
EVM	3.5%, max meets 3GPP requirements for 256 QAM

## 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 corporate buildings and campuses; international airports and metropolitan subways.

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