



# ALLIANCE™ MULTI-CARRIER DAS 1W SPECIFICATIONS AND PARTS

## SOLID ALLIANCE DAS 1W RF SPECIFICATIONS

Item	700LTE Upper C Block	700LTE Full band	700PS	800 PS/DEN	850 Cellular	900 SMR	900 Paging	1900 PCS	2100 AWS	VHF	UHF	
Frequency Range	Tx(MHz)	746-756	728-756	764-776	851-869	869-894	929-940	929-930	1930-1995	2110-2155	136-174	385-512
	Rx(MHz)	777-787	698-716 777-787	794-806	806-824	824-849	896-902	896-902	1850-1915	1710-1755	136-174	385-512
Input Power	Tx(dBm)	-20 to +10	-20 to +10	-20 to +10	-20 to +10	-20 to +10	-20 to +10	-20 to +10	-20 to +10	-20 to +10	-15 to +10	-15 to +10
	Rx(dBm)	≤ -50	≤ -50	≤ -50	≤ -50	≤ -50	≤ -50	≤ -50	≤ -50	≤ -50	≤ -54	≤ -54
Output Power	Tx(dBm)	23	23	23	25	26	25	25	30	30	24	24
	Rx(dBm)	0	0	0	0	0	0	0	0	0	-4	-4
System Gain	Tx(dBm)	43	43	43	45	46	45	45	50	50	39	39
	Rx(dBm)	50	50	50	50	50	50	50	50	50	50	50
System Delay (not including fiber optic delay)	Tx	< 1µs	< 1.5µs	< 1µs	< 4µs	< 4µs	< 1µs	< 1µs	< 2µs	< 1µs	< 2µs	< 2µs
	Rx	< 4µs	< 1µs	< 8µs	< 8µs	< 8µs	< 4µs	< 4µs	< 3µs	< 2µs	< 2µs	< 2µs
Spurious Emissions	Tx	≤ -13dBm @ 9kHz - 5GHz										
Out of Band Attenuation	Rx	≤ 45dB @ F <sub>edge</sub> ± 1MHz offset										
Gain Control Range/Step	Tx	25dB/step 1dB										
	Rx	20dB/step 1dB										
Spurious	Tx	< -13dBm @ 9kHz - 5GHz										
Optic wavelength	Tx	1310nm WDM										
	Rx	1550nm WDM										
Optical Link AGC	Above 10dB											
Optical Link Loss	Max 5dB											
Noise Figure	15dB Max							10dB Max		7dB Max		
Optical Connector	SC-APC (Single-Mode Fiber)											

## DETAILED PARTS LIST AND SPECIFICATIONS - SOLID ALLIANCE DAS

Part Description	Part Number	Size (L x W x H)	Rack Space	Weight - lbs (Fully Loaded)	Power Consumption
BIU Chassis (UHF/VHF Inputs Standard)	BIU_C	17.7" x 19" x 8.72"	5U	49.2	88W
700MHz LTE FB SISO	MDBU_700LTE_S	10.96" x 1.57" x 5.5"	N/A	6.82	12W
700MHz LTE FB MIMO	MDBU_700LTE_M	10.96" x 1.57" x 5.5"	N/A	7.04	19W
800MHz	MDBU_800PS	10.96" x 1.57" x 5.5"	N/A	6.6	12W
850MHz	MDBU_850	10.96" x 1.57" x 5.5"	N/A	6.6	12W
800MHz & 900MHz	MDBU_800PS_900I_PA	10.96" x 1.57" x 5.5"	N/A	6.82	20W
850MHz & 700MHz PS	MDBU_850C_700PS	10.96" x 1.57" x 5.5"	N/A	7.04	19W
850MHz & 700MHz LTE Upper C	MDBU_850C_700LTE	10.96" x 1.57" x 5.5"	N/A	7.04	19W
1900MHz	MDBU_1900P	10.96" x 1.57" x 5.5"	N/A	6.82	20W
2100MHz	MDBU_AWS	10.96" x 1.57" x 5.5"	N/A	6.82	12W
Blank BIU Module	BIU_B (BIU Blank)	10.96" x 1.57" x 5.5"	N/A	0.88	2W
Optical Distribution Unit Chassis	ODU_C	17.7" x 19" x 1.75"	1U	12.56	3W
4 Port Optical Module	ODU_OM_4	11.8" x 5.6" x 1.1"	N/A	3.52	10W
Blank Optical Module for the ODU	ODU_B (ODU Blank)	11.8" x 5.6" x 1.1"	N/A	0.88	1W
Optical Expansion Unit Chassis	OEU_C	17.7" x 19" x 3.46"	2U	20.5	12W
4 Port Optical Module	OEU_OM_4	11.8" x 5.6" x 1.1"	N/A	3.52	10W
Blank Optical Module for the OEU	OEU_B (Blank Module)	11.8" x 5.6" x 1.1"	N/A	0.88	1W
ROU Chassis- AC Power	ROU_C_AC	10.5" x 19" x 20.8"	12U	78	17W
ROU Chassis- DC Power	ROU_C_DC	10.5" x 19" x 20.8"	12U	78	17W
700MHz LTE FB SISO Amplifier Module	RDU_700LTE_S	5.5" x 2.32" x 17.7"	N/A	5.94	39W
700MHz LTE FB MIMO Amplifier Module	RDU_700LTE_M	5.5" x 2.32" x 17.7"	N/A	6.38	93W
800MHz Amplifier Module	RDU_800PS	5.5" x 2.32" x 17.7"	N/A	5.94	39W
850MHz Amplifier Module	RDU_850C	5.5" x 2.32" x 17.7"	N/A	5.94	39W
800MHz & 900MHz Amplifier Module	RDU_800PS_900I_PA	5.5" x 2.32" x 17.7"	N/A	7.48	79W
850MHz & 700MHz Public Safety Amplifier Module	RDU_850C_700PS	5.5" x 2.32" x 17.7"	N/A	7.59	93W
850MHz & 700MHz LTE Upper Band Amplifier Module	RDU_850C_700LTE	5.5" x 2.32" x 17.7"	N/A	7.59	93W
1900MHz & 2100/1700MHz AWS Amplifier Module	RDU_1900P_AWS	5.5" x 2.32" x 14.88"	N/A	6.16	68W
150MHz VHF & 450MHz UHF Amplifier Module	RDU_150_450	5.5" x 2.32" x 14.88"	N/A	5.72	93W
Blank Amplifier Module	ROU_B (Blank Module)	N/A	N/A	0.66	0W
Add-on cabinet for ROU - AC Power	ROU_Add-On_AC	10.16" x 19" x 6.96"	4U	24.25	78W
Add-on cabinet for ROU - DC Power	ROU_Add-On_DC	10.16" x 19" x 6.96"	4U	24.25	78W

### SOLID TECHNOLOGIES USA

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### 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

