



DAS Products

DATA SHEET

DAS Interface Conditioner Module

DAST-xxxx-MODx-x



- Modular Design, Common for all bands
- A common connection point to the DAS system for multiple BTS's, platforms and spectrums
- Level Control for each BTS input allows for independent adjustment of TX & RX power
- Easy optimization features including separate Uplink and Downlink control
- Can support both 0 dBm and +30 dBm DAS TX inputs (high and low power)
- All connections are on front panel for Easy access
- Sample ports for easy optimization, troubleshooting and maintenance
- High Rejection Duplexer Filters
- Designed for ultra low PIM performance
- Supports MIMO and SIMO Configurations
- Flexible design and configuration options
- Optional Duplex output to DAS System available

Overview

CCI's DAS Interface Conditioner module provides a single integrated connection point between a DAS system and multiple base stations. Its unique architecture interfaces with almost any MIMO or SIMO configuration. Each module can support up to two TX/RX BTS inputs. The DAS Interface module's TX output (to DAS) is available from either of two ports so that one port can be used for monitoring of the Tx signal, and the other for feeding the DAS. The module's Tx output ports are offset by 20dB so that a single unit can be used for both high input power and low input power DAS systems. Each Rx input from the DAS has a test port available on the module for independent monitoring of the DAS Rx signal. Independent leveling controls for each TX and RX input provide a simple way to control multiple inputs/outputs, significantly reducing link balance setup time. Base stations are connected with normal output power levels directly to the DAS Interface Module without the need to pre-attenuate power, preventing accidental overloads. The DAS conditioner module provides integrated high power attenuation for each channel with an adjustment range of up to 30 dB in 1 dB increments for both TX and Rx paths. It is a completely passive unit, with high rejection low PIM filters, requiring no external power, thus providing high reliability in a single compact design. Standard unit has Simplex output to DAS System, but optional Duplex output is available. Note that any unused TX/RX, TX Out (to DAS) or RX In (from DAS) ports must be terminated with loads rated for the appropriate ports power rating.



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DAS Interface Conditioner Module

DAST-xxxx-MODx-x

Electrical Specification

DAS Interface Conditioner Module (MIMO to MIMO) with Simplex Output

DAST-700L-MODC-S	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	698 - 716	18 dB typ.	
		728 - 746	18 dB typ.	
	RX TEST	698 - 716	16 dB typ.	
	RX IN	698 - 716	16 dB typ.	
	TX OUT LOW POWER	728 - 746	16 dB typ.	
	TX OUT HIGH POWER	728 - 746	16 dB typ.	
	Insertion Loss	TX/RX to TX OUT HIGH POWER	728 - 746	13 to 43 dB, adjustable in 1dB steps
		TX/RX to TX OUT LOW POWER	728 - 746	33 to 63 dB, adjustable in 1dB steps
		RX IN to TX/RX	698 - 716	5 to 35 dB, adjustable in 1dB steps
		RX IN to RX TEST	698 - 716	5 to 35 dB, adjustable in 1dB steps
Isolation	TXA to TXB	728 - 746	40 dB min.	
	TX/RX to RX IN	728 - 746	65 dB min. 80 dB typ.	
DAST-700H-MODC-S	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	776 - 793	18 dB typ.	
		746 - 763	18 dB typ.	
	RX TEST	776 - 793	16 dB typ.	
	RX IN	776 - 793	16 dB typ.	
	TX OUT LOW POWER	746 - 763	16 dB typ.	
Insertion Loss	TX OUT HIGH POWER	746 - 763	16 dB typ.	
	TX/RX to TX OUT HIGH POWER	746 - 763	13 to 43 dB, adjustable in 1dB steps	
	TX/RX to TX OUT LOW POWER	746 - 763	33 to 63 dB, adjustable in 1dB steps	
	RX IN to TX/RX	776 - 793	5 to 35 dB, adjustable in 1dB steps	
Isolation	RX IN to RX TEST	776 - 793	5 to 35 dB, adjustable in 1dB steps	
	TXA to TXB	746 - 763	40 dB min.	
	TX/RX to RX IN	746 - 763	65 dB min. 80 dB typ.	
DAST-SMR800-MODC-S	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	806 - 824	18 dB typ.	
		851 - 869	18 dB typ.	
	RX TEST	806 - 824	16 dB typ.	
	RX IN	806 - 824	16 dB typ.	
	TX OUT LOW POWER	851 - 869	16 dB typ.	
Insertion Loss	TX OUT HIGH POWER	851 - 869	16 dB typ.	
	TX/RX to TX OUT HIGH POWER	851 - 869	13 to 43 dB, adjustable in 1dB steps	
	TX/RX to TX OUT LOW POWER	851 - 869	33 to 63 dB, adjustable in 1dB steps	
	RX IN to TX/RX	806 - 824	5 to 35 dB, adjustable in 1dB steps	
Isolation	RX IN to RX TEST	806 - 824	5 to 35 dB, adjustable in 1dB steps	
	TXA to TXB	851 - 869	40 dB min.	
	TX/RX to RX IN	851 - 869	65 dB min. 80 dB typ.	



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DAS Interface Conditioner Module

DAST-xxxx-MODx-x

DAST-850-MODC-S	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	824 - 849	18 dB typ.	
		869 - 894	18 dB typ.	
	RX TEST	824 - 849	16 dB typ.	
	RX IN	824 - 849	16 dB typ.	
	TX OUT LOW POWER	869 - 894	16 dB typ.	
	TX OUT HIGH POWER	869 - 894	16 dB typ.	
	Insertion Loss	TX/RX to TX OUT HIGH POWER	869 - 894	13 to 43 dB, adjustable in 1dB steps
		TX/RX to TX OUT LOW POWER	869 - 894	33 to 63 dB, adjustable in 1dB steps
		RX IN to TX/RX	824 - 849	5 to 35 dB, adjustable in 1dB steps
		RX IN to RX TEST	824 - 849	5 to 35 dB, adjustable in 1dB steps
Isolation	TXA to TXB	869 - 894	40 dB min.	
	TX/RX to RX IN	869 - 894	65 dB min. 80 dB typ.	
DAST-1900-MODC-S	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	1850 - 1915	18 dB typ.	
		1930 - 1995	18 dB typ.	
	RX TEST	1850 - 1915	16 dB typ.	
	RX IN	1850 - 1915	16 dB typ.	
	TX OUT LOW POWER	1930 - 1995	16 dB typ.	
	TX OUT HIGH POWER	1930 - 1995	16 dB typ.	
Insertion Loss	TX/RX to TX OUT HIGH POWER	1930 - 1995	13 to 43 dB, adjustable in 1dB steps	
	TX/RX to TX OUT LOW POWER	1930 - 1995	33 to 63 dB, adjustable in 1dB steps	
	RX IN to TX/RX	1850 - 1915	5 to 35 dB, adjustable in 1dB steps	
	RX IN to RX TEST	1850 - 1915	5 to 35 dB, adjustable in 1dB steps	
Isolation	TXA to TXB	1930 - 1995	40 dB min.	
	TX/RX to RX IN	1930 - 1995	65 dB min. 80 dB typ.	
DAST-1721-MODC-S	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	1710 - 1780	18 dB typ.	
		2110 - 2180	18 dB typ.	
	RX TEST	1710 - 1780	16 dB typ.	
	RX IN	1710 - 1780	16 dB typ.	
	TX OUT LOW POWER	2110 - 2180	16 dB typ.	
	TX OUT HIGH POWER	2110 - 2180	16 dB typ.	
Insertion Loss	TX/RX to TX OUT HIGH POWER	2110 - 2180	14 to 44 dB, adjustable in 1dB steps	
	TX/RX to TX OUT LOW POWER	2110 - 2180	34 to 64 dB, adjustable in 1dB steps	
	RX IN to TX/RX	1710 - 1780	5 to 35 dB, adjustable in 1dB steps	
	RX IN to RX TEST	1710 - 1780	5 to 35 dB, adjustable in 1dB steps	
Isolation	TXA to TXB	2110 - 2180	40 dB min.	
	TX/RX to RX IN	2110 - 2180	65 dB min. 80 dB typ.	



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DAST-xxxx-MODx-x

DAST-2300-MODC-S	Ports	Frequency(MHz)	Specification
Return Loss	TX/RX	2305 - 2320	18 dB typ.
		2345 - 2360	18 dB typ.
	RX TEST	2305 - 2320	16 dB typ.
	RX IN	2305 - 2320	16 dB typ.
	TX OUT LOW POWER	2345 - 2360	16 dB typ.
Insertion Loss	TX OUT HIGH POWER	2345 - 2360	16 dB typ.
	TX/RX to TX OUT HIGH POWER	2345 - 2360	14 to 44 dB, adjustable in 1dB steps
	TX/RX to TX OUT LOW POWER	2345 - 2360	34 to 64 dB, adjustable in 1dB steps
	RX IN to TX/RX	2305 - 2320	5 to 35 dB, adjustable in 1dB steps
	RX IN to RX TEST	2305 - 2320	5 to 35 dB, adjustable in 1dB steps
Isolation	TXA to TXB	2345 - 2360	40 dB min.
	TX/RX to RX IN	2345 - 2360	65 dB min. 80 dB typ.



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DAS Interface Conditioner Module

DAST-xxxx-MODx-x

DAS Interface Conditioner Module (MIMO to MIMO) with Duplex Output

DAST-700L-MODC-D	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	698 - 716	18 dB typ.	
		728 - 746	18 dB typ.	
	RX TEST	698 - 716	16 dB typ.	
	DAS TX/RX HIGH POWER	698 - 716	16 dB typ.	
		728 - 746	16 dB typ.	
	TX OUT LOW POWER	728 - 746	16 dB typ.	
	Insertion Loss	TX/RX to DAS TX/RX HIGH POWER	728 - 746	17 to 47 dB, adjustable in 1dB steps
			698 - 716	24 to 54 dB, adjustable in 1dB steps
		TX/RX to TX OUT LOW POWER	728 - 746	33 to 63 dB, adjustable in 1dB steps
		DAS TX/RX HIGH POWER to RX TEST	698 - 716	24 to 54 dB, adjustable in 1 dB steps
Isolation	TXA to TXB	728 - 746	40 dB min.	
DAST-700H-MODC-D	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	776 - 793	18 dB typ.	
		746 - 763	18 dB typ.	
	RX TEST	776 - 793	16 dB typ.	
	DAS TX/RX HIGH POWER	776 - 793	16 dB typ.	
		746 - 763	16 dB typ.	
	TX OUT LOW POWER	746 - 763	16 dB typ.	
Insertion Loss	TX/RX to DAS TX/RX HIGH POWER	746 - 763	17 to 47 dB, adjustable in 1dB steps	
		776 - 793	24 to 54 dB, adjustable in 1dB steps	
	TX/RX to TX OUT LOW POWER	746 - 763	33 to 63 dB, adjustable in 1dB steps	
	DAS TX/RX HIGH POWER to RX TEST	776 - 793	24 to 54 dB, adjustable in 1dB steps	
Isolation	TXA to TXB	746 - 763	40 dB min.	
DAST-SMR800-MODC-D	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	806 - 824	18 dB typ.	
		851 - 869	18 dB typ.	
	RX TEST	806 - 824	16 dB typ.	
	DAS TX/RX HIGH POWER	806 - 824	16 dB typ.	
		851 - 869	16 dB typ.	
	TX OUT LOW POWER	851 - 869	16 dB typ.	
Insertion Loss	TX/RX to DAS TX/RX HIGH POWER	851 - 869	16 to 46 dB, adjustable in 1dB steps	
		806 - 824	23 to 53 dB, adjustable in 1dB steps	
	TX/RX to TX OUT LOW POWER	851 - 869	32 to 62 dB, adjustable in 1dB steps	
	DAS TX/RX HIGH POWER to RX TEST	806 - 824	23 to 53 dB, adjustable in 1dB steps	
Isolation	TXA to TXB	851 - 869	40 dB min.	



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DAST-xxxx-MODx-x

DAST-850-MODC-D	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	824 - 849	18 dB typ.	
		869 - 894	18 dB typ.	
	RX TEST	824 - 849	16 dB typ.	
	DAS TX/RX HIGH POWER	824 - 849	16 dB typ.	
		869 - 894	16 dB typ.	
	TX OUT LOW POWER	869 - 894	16 dB typ.	
	Insertion Loss	TX/RX to DAS TX/RX HIGH POWER	869 - 894	16 to 46 dB, adjustable in 1dB steps
			824 - 849	23 to 53 dB, adjustable in 1dB steps
		TX/RX to TX OUT LOW POWER	869 - 894	32 to 62 dB, adjustable in 1dB steps
		DAS TX/RX HIGH POWER to RX TEST	824 - 849	23 to 53 dB, adjustable in 1dB steps
Isolation	TXA to TXB	869 - 894	40 dB min.	
DAST-1900-MODC-D	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	1850 - 1915	18 dB typ.	
		1930 - 1995	18 dB typ.	
	RX TEST	1850 - 1915	16 dB typ.	
	DAS TX/RX HIGH POWER	1850 - 1915	16 dB typ.	
		1930 - 1995	16 dB typ.	
	TX OUT LOW POWER	1930 - 1995	16 dB typ.	
Insertion Loss	TX/RX to DAS TX/RX HIGH POWER	1930 - 1995	17 to 47 dB, adjustable in 1dB steps	
		1850 - 1915	24 to 54 dB, adjustable in 1dB steps	
	TX/RX to TX OUT LOW POWER	1930 - 1995	33 to 63 dB, adjustable in 1dB steps	
	DAS TX/RX HIGH POWER to RX TEST	1850 - 1915	24 to 54 dB, adjustable in 1dB steps	
Isolation	TXA to TXB	1930 - 1995	40 dB min.	
DAST-1721-MODC-D	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	1710 - 1780	18 dB typ.	
		2110 - 2180	18 dB typ.	
	RX TEST	1710 - 1780	16 dB typ.	
	DAS TX/RX HIGH POWER	1710 - 1780	16 dB typ.	
		2110 - 2180	16 dB typ.	
	TX OUT LOW POWER	2110 - 2180	16 dB typ.	
Insertion Loss	TX/RX to DAS TX/RX HIGH POWER	2110 - 2180	18 to 48 dB, adjustable in 1dB steps	
		1710 - 1780	24 to 54 dB, adjustable in 1dB steps	
	TX/RX to TX OUT LOW POWER	2110 - 2180	34 to 64 dB, adjustable in 1dB steps	
	DAS TX/RX HIGH POWER to RX TEST	1710 - 1780	24 to 54 dB, adjustable in 1dB steps	
Isolation	TXA to TXB	2110 - 2180	40 dB min.	



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DAST-xxxx-MODx-x

DAST-2300-MODC-D	Ports	Frequency(MHz)	Specification
Return Loss	TX/RX	2305 - 2320	18 dB typ.
		2345 - 2360	18 dB typ.
	RX TEST	2305 - 2320	16 dB typ.
	DAS TX/RX HIGH POWER	2305 - 2320	16 dB typ.
		2345 - 2360	16 dB typ.
	TX OUT LOW POWER	2345 - 2360	16 dB typ.
Insertion Loss	TX/RX to DAS TX/RX HIGH POWER	2345 - 2360	18 to 48 dB, adjustable in 1dB steps
		2305 - 2320	24 to 54 dB, adjustable in 1dB steps
	TX/RX to TX OUT LOW POWER	2345 - 2360	34 to 64 dB, adjustable in 1dB steps
	DAS TX/RX HIGH POWER to RX TEST	2305 - 2320	24 to 54 dB, adjustable in 1dB steps
Isolation	TXA to TXB	2345 - 2360	40 dB min.



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DAS Interface Conditioner Module

DAST-xxxx-MODx-x

DAS Interface Conditioner Module (MIMO to SIMO) with Simplex Output

DAST-700L-MODD-S	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	698 - 716	18 dB typ.	
		728 - 746	18 dB typ.	
	RX TEST	698 - 716	16 dB typ.	
	RX IN	698 - 716	16 dB typ.	
	TX OUT LOW POWER	728 - 746	16 dB typ.	
	TX OUT HIGH POWER	728 - 746	16 dB typ.	
	Insertion Loss	TX/RX to TX OUT HIGH POWER	728 - 746	17 to 47 dB, adjustable in 1dB steps
		TX/RX to TX OUT LOW POWER	728 - 746	37 to 67 dB, adjustable in 1dB steps
		RX IN to TX/RX	698 - 716	7 to 37 dB, adjustable in 1dB steps
		RX IN to RX TEST	698 - 716	7 to 37 dB, adjustable in 1dB steps
Isolation	TXA to TXB	728 - 746	40 dB min.	
	TX/RX to RX IN	728 - 746	65 dB min. 80 dB typ.	
DAST-700H-MODD-S	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	776 - 793	18 dB typ.	
		746 - 763	18 dB typ.	
	RX TEST	776 - 793	16 dB typ.	
	RX IN	776 - 793	16 dB typ.	
	TX OUT LOW POWER	746 - 763	16 dB typ.	
	TX OUT HIGH POWER	746 - 763	16 dB typ.	
Insertion Loss	TX/RX to TX OUT HIGH POWER	746 - 763	17 to 47 dB, adjustable in 1dB steps	
	TX/RX to TX OUT LOW POWER	746 - 763	37 to 67 dB, adjustable in 1dB steps	
	RX IN to TX/RX	776 - 793	7 to 37 dB, adjustable in 1dB steps	
	RX IN to RX TEST	776 - 793	7 to 37 dB, adjustable in 1dB steps	
Isolation	TXA to TXB	746 - 763	40 dB min.	
	TX/RX to RX IN	746 - 763	65 dB min. 80 dB typ.	
DAST-SMR800-MODD-S	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	806 - 824	18 dB typ.	
		851 - 869	18 dB typ.	
	RX TEST	806 - 824	16 dB typ.	
	RX IN	806 - 824	16 dB typ.	
	TX OUT LOW POWER	851 - 869	16 dB typ.	
	TX OUT HIGH POWER	851 - 869	16 dB typ.	
Insertion Loss	TX/RX to TX OUT HIGH POWER	851 - 869	16 to 46 dB, adjustable in 1dB steps	
	TX/RX to TX OUT LOW POWER	851 - 869	36 to 66 dB, adjustable in 1dB steps	
	RX IN to TX/RX	806 - 824	7 to 37 dB, adjustable in 1dB steps	
	RX IN to RX TEST	806 - 824	7 to 37 dB, adjustable in 1dB steps	
Isolation	TXA to TXB	851 - 869	40 dB min.	
	TX/RX to RX IN	851 - 869	65 dB min. 80 dB typ.	



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DAS Interface Conditioner Module

DAST-xxxx-MODx-x

DAST-850-MODD-S	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	824 - 849	18 dB typ.	
		869 - 894	18 dB typ.	
	RX TEST	824 - 849	16 dB typ.	
	RX IN	824 - 849	16 dB typ.	
	TX OUT LOW POWER	869 - 894	16 dB typ.	
	TX OUT HIGH POWER	869 - 894	16 dB typ.	
	Insertion Loss	TX/RX to TX OUT HIGH POWER	869 - 894	16 to 46 dB, adjustable in 1dB steps
		TX/RX to TX OUT LOW POWER	869 - 894	36 to 66 dB, adjustable in 1dB steps
		RX IN to TX/RX	824 - 849	7 to 37 dB, adjustable in 1dB steps
		RX IN to RX TEST	824 - 849	7 to 37 dB, adjustable in 1dB steps
Isolation	TXA to TXB	869 - 894	40 dB min.	
	TX/RX to RX IN	869 - 894	65 dB min. 80 dB typ.	
DAST-1900-MODD-S	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	1850 - 1915	18 dB typ.	
		1930 - 1995	18 dB typ.	
	RX TEST	1850 - 1915	16 dB typ.	
	RX IN	1850 - 1915	16 dB typ.	
	TX OUT LOW POWER	1930 - 1995	16 dB typ.	
	TX OUT HIGH POWER	1930 - 1995	16 dB typ.	
Insertion Loss	TX/RX to TX OUT HIGH POWER	1930 - 1995	17 to 47 dB, adjustable in 1dB steps	
	TX/RX to TX OUT LOW POWER	1930 - 1995	37 to 67 dB, adjustable in 1dB steps	
	RX IN to TX/RX	1850 - 1915	7 to 37 dB, adjustable in 1dB steps	
	RX IN to RX TEST	1850 - 1915	7 to 37 dB, adjustable in 1dB steps	
Isolation	TXA to TXB	1930 - 1995	40 dB min.	
	TX/RX to RX IN	1930 - 1995	65 dB min. 80 dB typ.	
DAST-1721-MODD-S	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	1710 - 1780	18 dB typ.	
		2110 - 2180	18 dB typ.	
	RX TEST	1710 - 1780	16 dB typ.	
	RX IN	1710 - 1780	16 dB typ.	
	TX OUT LOW POWER	2110 - 2180	16 dB typ.	
	TX OUT HIGH POWER	2110 - 2180	16 dB typ.	
Insertion Loss	TX/RX to TX OUT HIGH POWER	2110 - 2180	18 to 48 dB, adjustable in 1dB steps	
	TX/RX to TX OUT LOW POWER	2110 - 2180	38 to 68 dB, adjustable in 1dB steps	
	RX IN to TX/RX	1710 - 1780	7 to 37 dB, adjustable in 1dB steps	
	RX IN to RX TEST	1710 - 1780	7 to 37 dB, adjustable in 1dB steps	
Isolation	TXA to TXB	2110 - 2180	40 dB min.	
	TX/RX to RX IN	2110 - 2180	65 dB min. 80 dB typ.	



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DAS Interface Conditioner Module

DAST-xxxx-MODx-x

DAST-2300-MODD-S	Ports	Frequency(MHz)	Specification
Return Loss	TX/RX	2305 - 2320	18 dB typ.
		2345 - 2360	18 dB typ.
	RX TEST	2305 - 2320	16 dB typ.
	RX IN	2305 - 2320	16 dB typ.
	TX OUT LOW POWER	2345 - 2360	16 dB typ.
Insertion Loss	TX OUT HIGH POWER	2345 - 2360	16 dB typ.
	TX/RX to TX OUT HIGH POWER	2345 - 2360	18 to 48 dB, adjustable in 1dB steps
	TX/RX to TX OUT LOW POWER	2345 - 2360	38 to 68 dB, adjustable in 1dB steps
	RX IN to TX/RX	2305 - 2320	7 to 37 dB, adjustable in 1dB steps
	RX IN to RX TEST	2305 - 2320	7 to 37 dB, adjustable in 1dB steps
Isolation	TXA to TXB	2345 - 2360	40 dB min.
	TX/RX to RX IN	2345 - 2360	65 dB min. 80 dB typ.



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DAS Interface Conditioner Module

DAST-xxxx-MODx-x

DAS Interface Conditioner Module (MIMO to SIMO) with Duplex Output

DAST-700L-MODD-D	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	698 - 716	18 dB typ.	
		728 - 746	18 dB typ.	
	RX TEST	698 - 716	16 dB typ.	
	DAS TX/RX HIGH POWER	698 - 716	16 dB typ.	
		728 - 746	16 dB typ.	
	TX OUT LOW POWER	728 - 746	16 dB typ.	
	Insertion Loss	TX/RX to DAS TX/RX HIGH POWER	728 - 746	21 to 51 dB, adjustable in 1dB steps
			698 - 716	26 to 56 dB, adjustable in 1dB steps
		TX/RX to TX OUT LOW POWER	728 - 746	37 to 67 dB, adjustable in 1dB steps
			DAS TX/RX HIGH POWER to RX TEST	698 - 716
Isolation	TXA to TXB	728 - 746	40 dB min.	
DAST-700H-MODD-D	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	776 - 793	18 dB typ.	
		746 - 763	18 dB typ.	
	RX TEST	776 - 793	16 dB typ.	
	DAS TX/RX HIGH POWER	776 - 793	16 dB typ.	
		746 - 763	16 dB typ.	
TX OUT LOW POWER	746 - 763	16 dB typ.		
Insertion Loss	TX/RX to DAS TX/RX HIGH POWER	746 - 763	21 to 51 dB, adjustable in 1dB steps	
		776 - 793	26 to 56 dB, adjustable in 1dB steps	
	TX/RX to TX OUT LOW POWER	746 - 763	37 to 67 dB, adjustable in 1dB steps	
		DAS TX/RX HIGH POWER to RX TEST	776 - 793	26 to 56 dB, adjustable in 1dB steps
Isolation	TXA to TXB	746 - 763	40 dB min.	
DAST-SMR800-MODD-D	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	806 - 824	18 dB typ.	
		851 - 869	18 dB typ.	
	RX TEST	806 - 824	16 dB typ.	
	DAS TX/RX HIGH POWER	806 - 824	16 dB typ.	
		851 - 869	16 dB typ.	
TX OUT LOW POWER	851 - 869	16 dB typ.		
Insertion Loss	TX/RX to DAS TX/RX HIGH POWER	851 - 869	20 to 50 dB, adjustable in 1dB steps	
		806 - 824	25 to 55 dB, adjustable in 1dB steps	
	TX/RX to TX OUT LOW POWER	851 - 869	36 to 66 dB, adjustable in 1dB steps	
		DAS TX/RX HIGH POWER to RX TEST	806 - 824	25 to 55 dB, adjustable in 1dB steps
Isolation	TXA to TXB	869 - 894	40 dB min.	



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DAS Interface Conditioner Module

DAST-xxxx-MODx-x

DAST-850-MODD-D	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	824 - 849	18 dB typ.	
		869 - 894	18 dB typ.	
	RX TEST	824 - 849	16 dB typ.	
	DAS TX/RX HIGH POWER	824 - 849	16 dB typ.	
		869 - 894	16 dB typ.	
	TX OUT LOW POWER	869 - 894	16 dB typ.	
	Insertion Loss	TX/RX to DAS TX/RX HIGH POWER	869 - 894	20 to 50 dB, adjustable in 1dB steps
			824 - 869	25 to 55 dB, adjustable in 1dB steps
		TX/RX to TX OUT LOW POWER	869 - 894	36 to 66 dB, adjustable in 1dB steps
		DAS TX/RX HIGH POWER to RX TEST	824 - 849	25 to 55 dB, adjustable in 1dB steps
Isolation	TXA to TXB	869 - 894	40 dB min.	
DAST-1900-MODD-D	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	1850 - 1915	18 dB typ.	
		1930 - 1995	18 dB typ.	
	RX TEST	1850 - 1915	16 dB typ.	
	DAS TX/RX HIGH POWER	1850 - 1915	16 dB typ.	
		1930 - 1995	16 dB typ.	
	TX OUT LOW POWER	1930 - 1995	16 dB typ.	
Insertion Loss	TX/RX to DAS TX/RX HIGH POWER	1930 - 1995	21 to 51 dB, adjustable in 1dB steps	
		1850 - 1915	26 to 56 dB, adjustable in 1dB steps	
	TX/RX to TX OUT LOW POWER	1930 - 1995	37 to 67 dB, adjustable in 1dB steps	
	DAS TX/RX HIGH POWER to RX TEST	1850 - 1915	26 to 56 dB, adjustable in 1dB steps	
Isolation	TXA to TXB	1930 - 1995	40 dB min.	
DAST-1721-MODD-D	Ports	Frequency(MHz)	Specification	
Return Loss	TX/RX	1710 - 1780	18 dB typ.	
		2110 - 2180	18 dB typ.	
	RX TEST	1710 - 1780	16 dB typ.	
	DAS TX/RX HIGH POWER	1710 - 1780	16 dB typ.	
		2110 - 2180	16 dB typ.	
	TX OUT LOW POWER	2110 - 2180	16 dB typ.	
Insertion Loss	TX/RX to DAS TX/RX HIGH POWER	2110 - 2180	21 to 51 dB, adjustable in 1dB steps	
		1710 - 1780	26 to 56 dB, adjustable in 1dB steps	
	TX/RX to TX OUT LOW POWER	2110 - 2180	38 to 68 dB, adjustable in 1dB steps	
	DAS TX/RX HIGH POWER to RX TEST	1710 - 1780	26 to 56 dB, adjustable in 1dB steps	
Isolation	TXA to TXB	2110 - 2180	40 dB min.	



SPECIFICATIONS

DAS Interface Conditioner Module

DAST-xxxx-MODx-x

DAST-2300-MODD-D	Ports	Frequency(MHz)	Specification
Return Loss	TX/RX	2305 - 2320	18 dB typ.
		2345 - 2360	18 dB typ.
	RX TEST	2305 - 2320	16 dB typ.
	DAS TX/RX HIGH POWER	2305 - 2320	16 dB typ.
		2345 - 2360	16 dB typ.
Insertion Loss	TX OUT LOW POWER	2345 - 2360	16 dB typ.
		TX/RX to DAS TX/RX HIGH POWER	2345 - 2360
		2305 - 2320	26 to 56 dB, adjustable in 1dB steps
	TX/RX to TX OUT LOW POWER	2345 - 2360	38 to 68 dB, adjustable in 1dB steps
	DAS TX/RX HIGH POWER to RX TEST	2305 - 2320	26 to 56 dB, adjustable in 1dB steps
Isolation	TXA to TXB	2345 - 2360	40 dB min.

General Characteristics	
Impedance	50 ohms
Continuous Average Power	60 W max. at TX/RX port
Peak Envelope Power	2 kW max.
Intermodulation Performance	<-110 dBm (-153 dBc) min.; -118 dBm (-161 dBc) typ. (2 x +43 dBm tones)

Environmental Specification

Operating Temperature	0 °C to +55 °C
MTBF	>500,000 hours

Mechanical Specification

Connectors	DAST-XXXX-MODC-S	DAST-XXXX-MODC-D	DAST-XXXX-MODD-S	DAST-XXXX-MODD-D
TX/RX	2 x DIN female	2 x DIN female	2 x DIN female	2 x DIN female
RX IN	2 x QMA-Female	-	1 x QMA-Female	-
TX OUT HIGH POWER	2 x QMA-female	-	1 x QMA-Female	-
TX OUT LOW POWER	2 x QMA-female	2 x QMA-Female	1 x QMA-Female	1 x QMA-Female
TX OUT/RX IN	-	2 x QMA-Female	-	1 x QMA-Female
RX TEST	2 x QMA-female	2 x QMA-Female	1 x QMA-Female	1 x QMA-Female
Dimensions(H(2U)xWxD) Front panel to rear of unit	3.5 x 8.6 x 19.2 in. (88.9 x 218.44x 487.68 mm)		3.5 x 8.6 x 18.45 in. (88.9 x 218.44x 468.63 mm)	
Dimensions(H(2U)xWxD) w/connectors and brackets	3.5 x 8.6 x 20.8 in. (88.9 x 218.44x 528.32 mm)		3.5 x 8.6 x 20.8 in. (88.9 x 218.44x 528.32 mm)	
Mounting	Mount in Universal DAS Tray (TRA-DAS-UNIV 19 in. Rack Mountable)			
Weight				
700L	19.7 lbs (9.0 kg)	20.7 lbs (9.4 kg)	17.4 lbs (7.9 kg)	17.75 lbs (8.0 kg)
700H	19.7 lbs (9.0 kg)	20.7 lbs (9.4 kg)	17.4 lbs (7.9 kg)	17.75 lbs (8.0 kg)
SMR800	20.2 lbs (9.2 kg)	21.3 lbs (9.7 kg)	17.9 lbs (8.1 kg)	18.3 lbs (8.3 kg)
850	20.2 lbs (9.2 kg)	21.3 lbs (9.7 kg)	17.9 lbs (8.1 kg)	18.3 lbs (8.3 kg)
1900	18.75 lbs (8.5 kg)	19.8 lbs (9.0 kg)	16.5 lbs (7.5 kg)	16.8 lbs (7.6 kg)
1721	21.2 lbs (9.6 kg)	22.3 lbs (10.1 kg)	18.9 lbs (8.6 kg)	19.3 lbs (8.8 kg)
2300	18.0 lbs (8.2 kg)	19.1 lbs (8.7 kg)	15.7 lbs (7.1 kg)	16.1 lbs (7.3 kg)

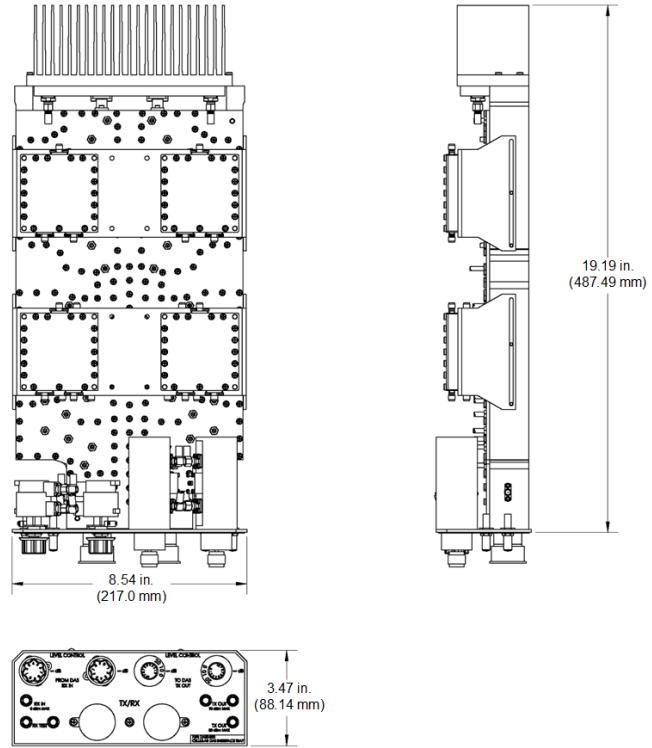


DAS Products

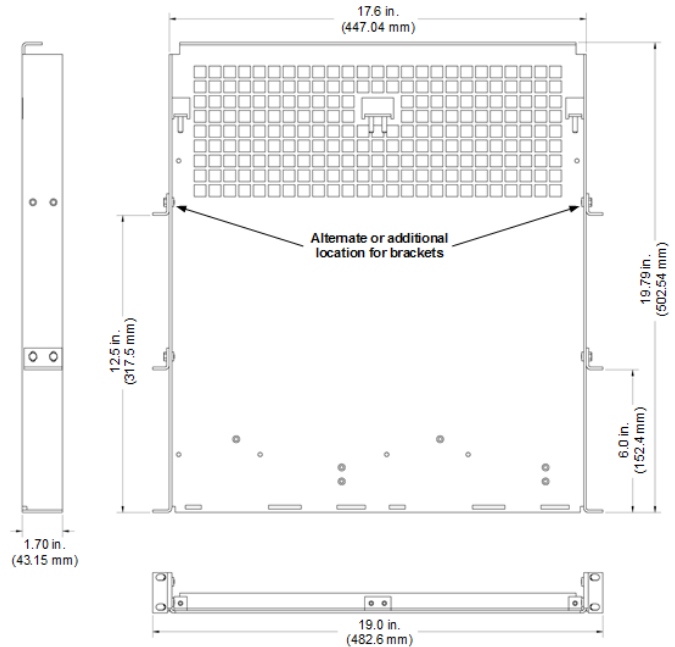
SPECIFICATIONS

DAS Interface Conditioner Module

DAST-xxxx-MODx-x



Modular DAS Interface Conditioner Tray Outline Drawing



Universal DAS shelf for DAS Interface Conditioner Outline Drawing



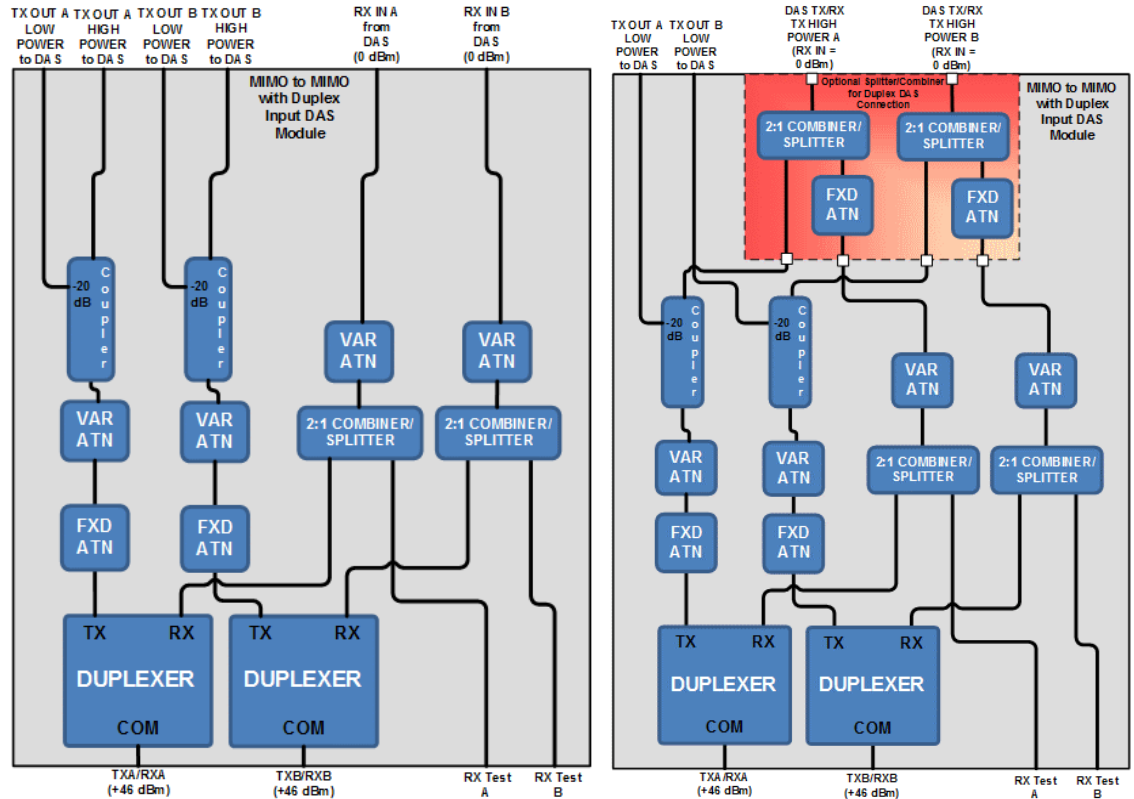
DAS Products

SPECIFICATIONS

DAS Interface Conditioner Module

DAST-xxxx-MODx-x

Block Diagram



MIMO to MIMO DAS Interface with Simplex Input to DAS (Models DAST-xxxx-MODC-S)

MIMO to MIMO DAS Interface with Duplex Input to DAS (Models DAST-xxxx-MODC-D)

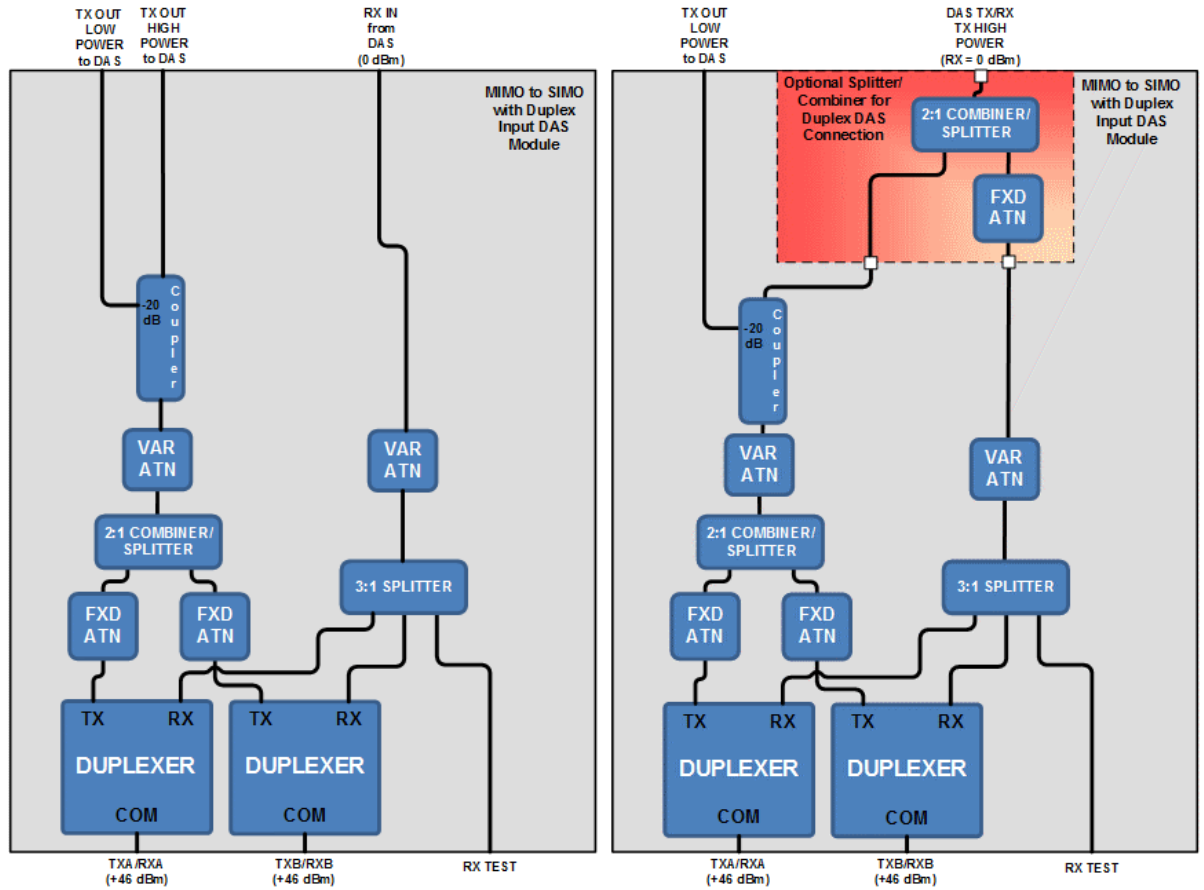


DAS Products

SPECIFICATIONS

DAS Interface Conditioner Module

DAST-xxxx-MODx-x



MIMO to SIMO DAS Interface with Simplex Input to DAS (Models DAST-xxxx-MODD-S)

MIMO to SIMO DAS Interface with Duplex Input to DAS (Models DAST-xxxx-MODD-D)



DAS Products

ORDERING

DAS Interface Conditioner Module

DAST-xxxx-MODx-x

Parts & Accessories

DAST-700L-MODC-S	700 Low Band MIMO to MIMO with Simplex output to DAS
DAST-700H-MODC-S	700 High Band MIMO to MIMO with Simplex output to DAS
DAST-SMR800-MODC-S	SMR800 Band MIMO to MIMO with Simplex output to DAS
DAST-850-MODC-S	Cellular Band MIMO to MIMO with Simplex output to DAS
DAST-1900-MODC-S	PCS Band MIMO to MIMO with Simplex output to DAS
DAST-1721-MODC-S	AWS Band MIMO to MIMO with Simplex output to DAS
DAST-2300-MODC-S	WCS Band MIMO to MIMO with Simplex output to DAS
DAST-700L-MODC-D	700 Low Band MIMO to MIMO with Duplex output to DAS
DAST-700H-MODC-D	700 High Band MIMO to MIMO with Duplex output to DAS
DAST-SMR800-MODC-D	SMR800 Band MIMO to MIMO with Duplex output to DAS
DAST-850-MODC-D	Cellular Band MIMO to MIMO with Duplex output to DAS
DAST-1900-MODC-D	PCS Band MIMO to MIMO with Duplex output to DAS
DAST-1721-MODC-D	AWS Band MIMO to MIMO with Duplex output to DAS
DAST-2300-MODC-D	WCS Band MIMO to MIMO with Duplex output to DAS
DAST-700L-MODD-S	700 Low Band MIMO to SIMO with Simplex output to DAS
DAST-700H-MODD-S	700 High Band MIMO to SIMO with Simplex output to DAS
DAST-SMR800-MODD-S	SMR800 Band MIMO to SIMO with Simplex output to DAS
DAST-850-MODD-S	Cellular Band MIMO to SIMO with Simplex output to DAS
DAST-1900-MODD-S	PCS Band MIMO to SIMO with Simplex output to DAS
DAST-1721-MODD-S	AWS Band MIMO to SIMO with Simplex output to DAS
DAST-2300-MODD-S	WCS Band MIMO to SIMO with Simplex output to DAS
DAST-700L-MODD-D	700 Low Band MIMO to SIMO with Duplex output to DAS
DAST-700H-MODD-D	700 High Band MIMO to SIMO with Duplex output to DAS
DAST-SMR800-MODD-D	SMR800 Band MIMO to SIMO with Duplex output to DAS
DAST-850-MODD-D	Cellular Band MIMO to SIMO with Duplex output to DAS
DAST-1900-MODD-D	PCS Band MIMO to SIMO with Duplex output to DAS
DAST-1721-MODD-D	AWS Band MIMO to SIMO with Duplex output to DAS
DAST-2300-MODD-D	WCS Band MIMO to SIMO with Duplex output to DAS



DAS Products

STANDARDS &
CERTIFICATIONS

DAS Interface Conditioner Module

DAST-xxxx-MODx-x

Certifications

Federal Communication Commission (FCC) Part 15 Class B, CE, CSA US