

AWS DAS Interface Module

Part of CCI's "Universal DAS Tray System"

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General Information

Model DAST-1721-MODA

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Module A Shown

CCI's AWS DAS Interface Module provides an integrated, convenient, and single connection point when using single or multiple AWS base stations with a common DAS

system. The unique architecture of the CCI AWS DAS Interface Module accommodates SIMO and MIMO configurations, including two operators providing MIMO coverage on a common MIMO DAS System. The AWS DAS Interface Modules are to be placed in the Universal DAS Interface Tray.

Integrated leveling controls are provided in both the uplink and downlink path in order to achieve the proper link balance to the DAS system for each base station channel. The AWS E-Node B's are connected directly to the DAS Interface Module without the need to attenuate power as the DAS module provides integrated high power attenuation for each channel with an adjustment range of 30dB with 1 dB increments. The DAS module is a completely passive assembly with no external power requirement thus providing the highest reliability and convenient installation. An optional duplexed connection To/From DAS is available on AWS MODA modules.

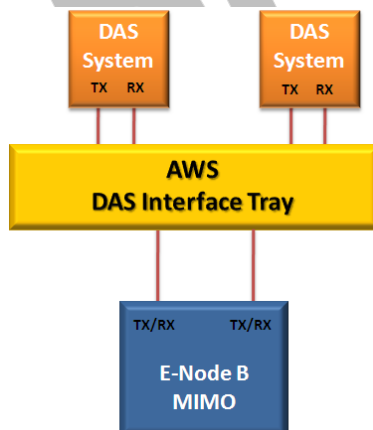


Figure I - Single MIMO E-Node B Configuration with MIMO Output to DAS System

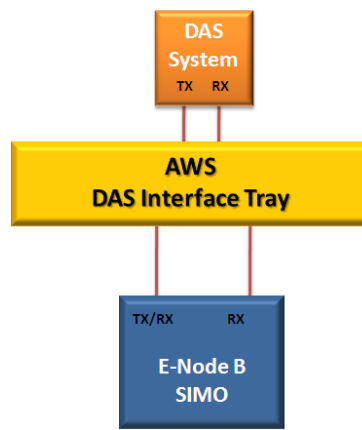


Figure II - Single SIMO E-Node B Configuration with SIMO Output to DAS System

Key Features:

- ◆ A common connection point for AWS Base stations to a single DAS system
- ◆ Levels and equalizes performance for all base stations with Integrated Level Controls
- ◆ No need to attenuate signals prior to connection to the DAS Tray
- ◆ Modular Design
- ◆ 1U (1.75") High modules mount in a 19" Rack Mount Universal DAS Tray

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AWS DAS Interface Module Typical Specifications

Description	Typical Specifications
RF Electrical	
RX Operating Frequency Range	1710 - 1770 MHz
TX Operating Frequency Range	2110 - 2170 MHz
Return Loss	18 dB Typ. (TX/RX port)
Insertion Loss	
Transmit Passband	
TX/RX to TX OUT	19.75 dB to 49.75 dB, adjustable in 1 dB steps
TX IN to TX OUT	5.25 dB to 35.25 dB, adjustable in 1 dB steps
Receive Passband	
RX IN to TX/RX	8.6 dB to 18.6 dB, adjustable in 1 dB steps
RX IN to RX	8.6 dB to 18.6 dB, adjustable in 1 dB steps
Filter Characteristics	
Transmit Isolation	
TX/RX to RX IN	70 dB with attenuator set to 0 dB
TX/RX to RX	83 dB
Continuous Average Power	100 Watts Max. at TX/RX port
Peak Envelope Power	2 KW Max.
Intermodulation Performance	
IMD at TX/RX port in RX Band	-118 dBm typical (2 tones at +43 dBm)
Mechanical	
TX/RX IN Connectors	7/16 DIN-Female - 1
RX IN Connectors	QMA-Female - 3
TX IN Connectors	QMA-Female - 1
TX OUT (to DAS), RX IN (from DAS) Connectors	QMA-Female - 1 each
Dimensions	1.75" (1U) H x 8.46" W x 17.43" D
Weight	9.2 Pounds (per module)
Mounting	19" Rack Mount (Up to two Modules can fit in a single 1U 19" rack mount tray)
Environmental	
Operating Temperature Range	0° C to +55° C
MTBF	> 500,000 Hours

All specifications are subject to change. The latest specifications are available at www.cciproductions.com

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“Detailed” AWS DAS System Configuration Diagrams

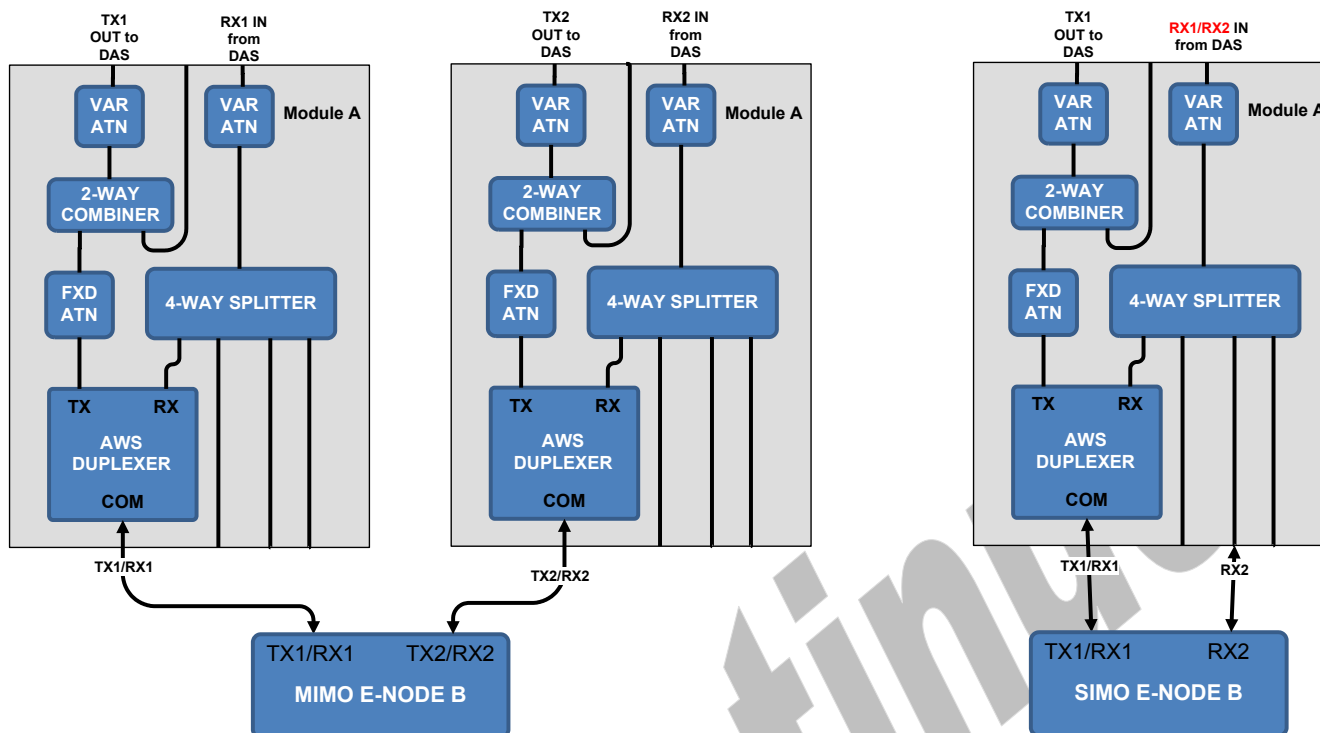


Figure I - Single MIMO E-Node B Configuration with MIMO Output to DAS System

Figure II - Single SIMO E-Node B Configuration with SIMO Output to DAS System

Model Numbers:

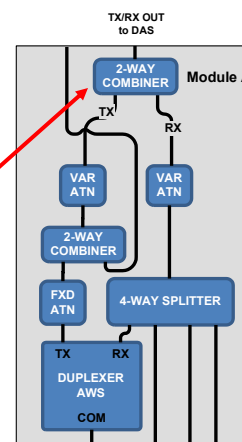
- ♦ Model DAST-1721-MODA “AWS DAS Module”; CEQ. 12541
- ♦ Model TRA-DAS-UNIV “Universal DAS Tray” for DAS Interface Modules (See separate datasheet for Tray specifications); CEQ. 12540

Options:

- ♦ -DPX “Single Duplexed connection To/From DAS” (on MODA); Note: adds 3 dB to Transmit and Receive Insertion Loss

Ordering Information:

Config. #	Configuration Description (MIMO, SIMO, Shared, Dual, or Single)	Quantity Model DAST-1721-MODA “AWS DAS Module” Required	Quantity Model TRA-DAS-UNIV “Universal Tray for DAS Interface Modules” Required
I	Single MIMO E-Node B Configuration with MIMO Output to DAS System	2	1
II	Single SIMO E-Node B Configuration with SIMO Output to DAS System	1	1



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