

# PCS (1900 Band) DAS Interface Tray with Independent Control

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## General Information



CCI's PCS Band DAS Interface Tray with "Independent Control" provides an integrated, convenient, and single connection point when using multiple base stations with a common DAS system. The unique architecture of the CCI DAS Interface Tray can simultaneously accommodate

up to four TX/Rx inputs from single or multiple base stations. Also provided are four extra Rx connections for Rx Only BTS ports, LMU connection or signal monitoring. Independent integrated leveling controls are provided in both the uplink and downlink path to accommodate multiple base station inputs with different output levels in order to achieve the proper link balance to the DAS system for each base station channel. BTS's of different technologies having different output powers can also be independently adjusted.

Base stations are connected directly to the DAS Interface Tray without the need to attenuate power as the DAS tray provides integrated high power attenuation for each channel with an adjustment range of 30 dB with 1 dB increments. The DAS Tray is a completely passive assembly with no external power requirement thus providing the highest reliability and convenient installation. High rejection, low PIM Duplexer filters are utilized in this design.

- ▶ **Model DAST-1900-4DI-0 (0 dBm Input)**
- ▶ **Model DAST-1900-4DI-30 (30 dBm Input)**

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## Key Features:

- ◆ Allows for a common connection point to a DAS system for multiple BTs, multiple platforms and multiple spectrums.
- ◆ Independent Level Control for each pair of BTS inputs allows for equalization of Tx and power from and to BTS's of different technologies.
- ◆ Easy optimization features including separate Uplink and Downlink control
- ◆ Flexible design and configuration options.
- ◆ High Rejection Duplexer Filters
- ◆ Four additional Rx connections provided for Rx Only BTS ports, E911 and Uplink Monitoring
- ◆ Allows operator to have easy access to DAS system connections for easy optimization, troubleshooting and maintenance
- ◆ 2U high - 19" Rack Mounted Tray

**PCS (1900 Band) DAS Interface Tray with Independent Control Typical Specifications**

Description	Typical Specifications (Model DAST-1900-4DI-0)
<b>RF Electrical</b>	
Transmit (Tx) Operating Frequency Range	1930 - 1995 MHz
Receive (Rx) Operating Frequency Range	1850 - 1915 MHz
Return Loss	18 dB Typ. All Ports
Insertion Loss	
Transmit Passband	
TX/RX to TX OUT (Per Port)	23 dB to 53 dB, adjustable in 1 dB steps
Receive Passband	
RX IN to TX/RX (Per Port)	12 dB to 22 dB, adjustable in 1 dB steps
RX IN to RX (Per Port)	12 dB to 22 dB, adjustable in 1 dB steps
Filter Characteristics	
Transmit Isolation	
TX/RX to RX IN	68 dB with attenuator set to 0 dB
TX/RX to RX	79 dB with attenuator set to 0 dB
Continuous Average Power	60 Watts Max. at TX/RX port
Peak Envelope Power	2 KW Max.
Intermodulation Performance	
IMD at ANT port in Rx Band	-118 dBm typical (2 tones at +43 dBm)
<b>Mechanical</b>	
RX IN (from DAS) Connections	1 x QMA-Female
TX OUT (to DAS) Connections	1 x QMA-Female
RX (to BTS or LMU or Uplink Monitor) Connections	4 x QMA-Female
TX/RX (from/to BTS) Connections	4 x 7/16 DIN-Female
Dimensions (from rear of Front Panel to rear of unit)	3.5" H x 19" W x 16.12" D (88.1 H x 482.6 W x 409.42 D mm)
Dimensions (with Front Connectors and Brackets)	3.5" H x 19" W x 17.62" D (88.1 H x 482.6 W x 447.52 D mm)
Mounting	19" Rack Mount
Weight	30 Pounds
<b>Environmental</b>	
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.cciproducts.com](http://www.cciproducts.com)

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**PCS (1900 Band) DAS Interface Tray with Independent Control Typical Specifications**

Description	Typical Specifications (Model DAST-1900-4DI-30)
<b>RF Electrical</b>	
Transmit (Tx) Operating Frequency Range	1930 - 1995 MHz
Receive (Rx) Operating Frequency Range	1850 - 1915 MHz
Return Loss	18 dB Typ. All Ports
Insertion Loss	
Transmit Passband	
TX/RX to TX OUT (Per Port)	15 dB to 45 dB, adjustable in 1 dB steps
Receive Passband	
RX IN to TX/RX (Per Port)	12 dB to 22 dB, adjustable in 1 dB steps
RX IN to RX (Per Port)	12 dB to 22 dB, adjustable in 1 dB steps
Filter Characteristics	
Transmit Isolation	
TX/RX to RX IN	68 dB with attenuator set to 0 dB
TX/RX to RX	79 dB with attenuator set to 0 dB
Continuous Average Power	60 Watts Max. at TX/RX port
Peak Envelope Power	2 KW Max.
Intermodulation Performance	
IMD at ANT port in Rx Band	-118 dBm typical (2 tones at +43 dBm)
<b>Mechanical</b>	
RX IN (from DAS) Connections	1 x QMA-Female
TX OUT (to DAS) Connections	1 x QMA-Female
RX (to BTS or LMU or Uplink Monitor) Connections	4 x QMA-Female
TX/RX (from/to BTS) Connections	4 x 7/16 DIN-Female
Dimensions (from rear of Front Panel to rear of unit)	3.5" H x 19" W x 16.12" D (88.1 H x 482.6 W x 409.42 D mm)
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<b>Environmental</b>	
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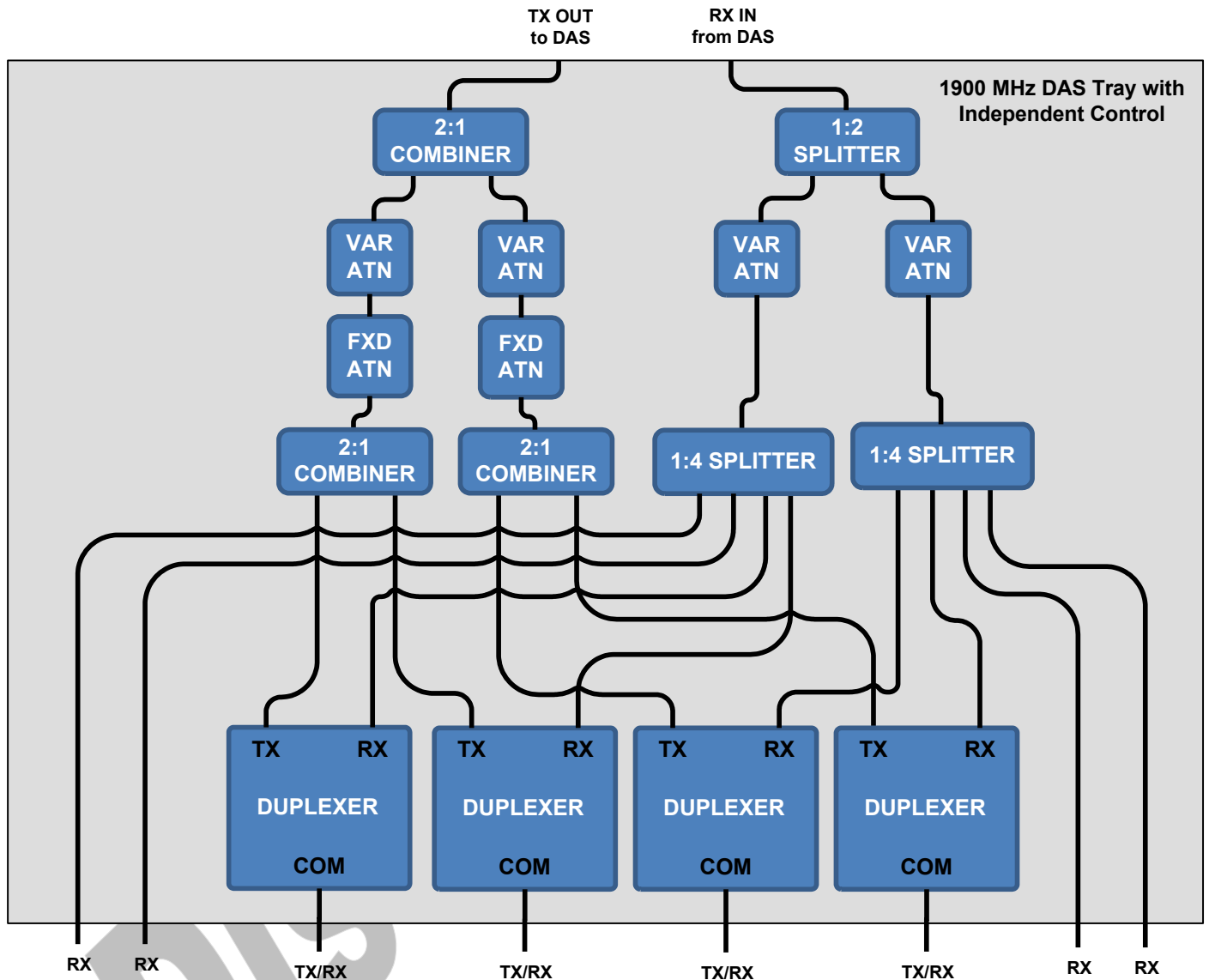
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## PCS (1900 Band) DAS Interface Tray with Independent Control (Simplex DAS Input/Output) Detailed Block Diagram



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# PCS (1900 Band) DAS Interface Tray with Independent Control (Simplex DAS Input/Output) Photographs





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### Ordering Information:

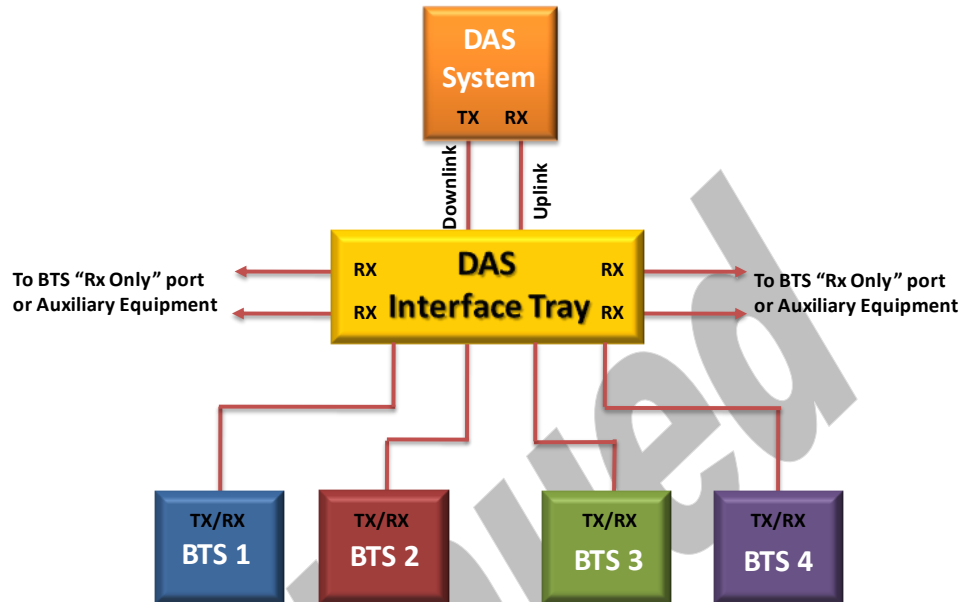
- ◆ Model DAST-1900-4DI-0  
(0 dBm Input)  
CEQ. 11414
- ◆ Model DAST-1900-4DI-30  
(30 dBm Input)  
CEQ. 11421

### Options:

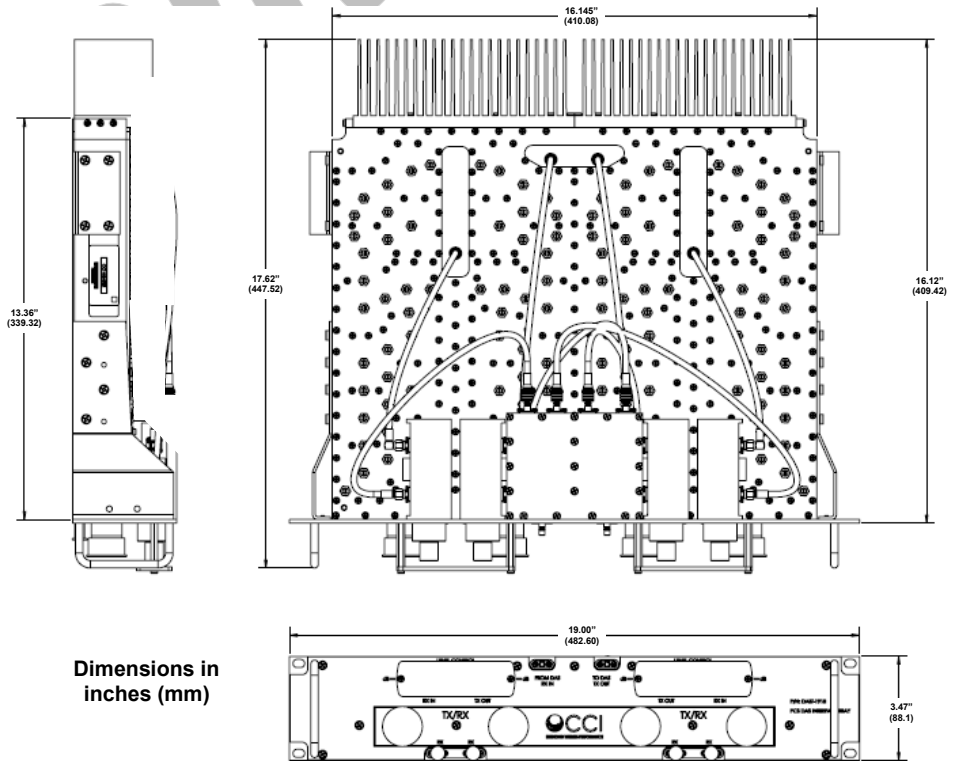
### Features

- ◆ 4 BTS Tx/Rx Inputs
- ◆ Independent Level Controls for each pair of Tx/Rx inputs
- ◆ Single DAS TX and RX Connections
- ◆ Front Panel TX and RX Gain Adjust
- ◆ 4 Additional Rx outputs for BTS Rx Only ports, LMU or Signal Monitoring
- ◆ Passive System
- ◆ Levels and equalizes performance for all base stations

## PCS (1900 Band) DAS Interface Tray with Independent Control Simple Block Diagram



## PCS (1900 Band) DAS Interface Tray with Independent Control Outline Drawing



Dimensions in inches (mm)