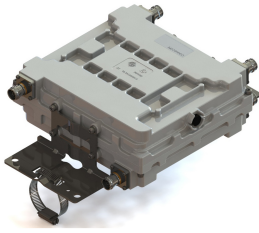


# TD-AWS-10-A\_F1-HIJ | E14Z00P05



AWS Twin In-Band Diplexer, AWS ABCDEF1/HIJ Bands with AISG/DC Sense

## OBSOLETE

### Replaced By:

CHB626-43-2X  
D15T01P38

Twin Hybrid Combiner

## Product Classification

**Product Type** Diplexer

## General Specifications

**Application** Indoor | Outdoor  
**AISG Carrier** 2176 KHz  $\pm$  100 ppm  
**Antenna Interface** 4.3-10 Female  
**Connector Interface Style** Long neck  
**Rx Interface** 4.3-10 Female

## Dimensions

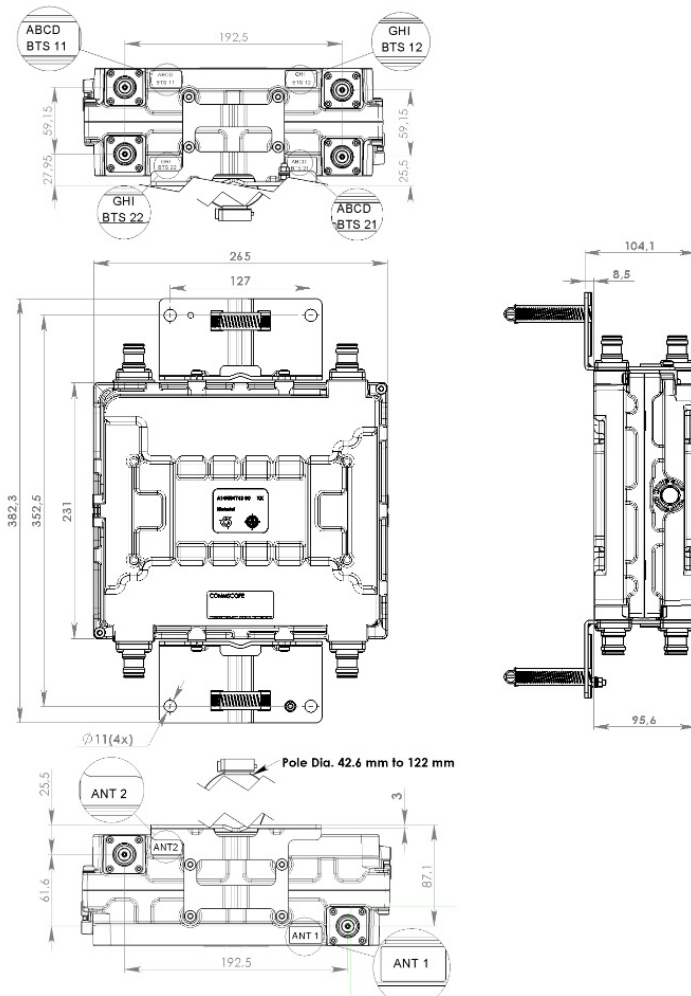
**Height** 231 mm | 9.094 in  
**Width** 265 mm | 10.433 in  
**Depth** 96 mm | 3.78 in  
**Ground Screw Diameter** 5 mm | 0.197 in

## dc/AISG Auto-Sense Logic

RF Ports Input Voltage		
BTS11	BTS12	DC/AISG Path Selection
$7 \leq V \leq 30$	$<7$	BTS11-ANT1 "ON" BTS12-ANT 1 "OFF"
$<7$	$7 \leq V \leq 30$	BTS 11-ANT 1 "OFF" BTS 12-ANT 1 "ON"
$V < 7$ or $V > 30$	$V < 7$ or $V > 30$	ALL ports OFF

RF Ports Input Voltage		
BTS21	BTS22	DC/AISG Path Selection
$7 \leq V \leq 30$	$<7$	BTS21-ANT2 "ON" BTS22-ANT 2 "OFF"
$<7$	$7 \leq V \leq 30$	BTS 21-ANT 2 "OFF" BTS 22-ANT 2 "ON"
$V < 7$ or $V > 30$	$V < 7$ or $V > 30$	ALL ports OFF

## Outline Drawing



## Electrical Specifications

<b>Lightning Surge Current</b>	10 kA
<b>Lightning Surge Current Waveform</b>	8/20 waveform

## Electrical Specifications, Rx (Uplink)

<b>Frequency Band</b>	1710 – 1750 MHz
<b>Insertion Loss, typical</b>	0.4 dB
<b>Return Loss, minimum</b>	18 dB
<b>Isolation, minimum</b>	28 dB
<b>License Band</b>	AWS

**Total Group Delay, maximum** 30 ns

## Electrical Specifications 2, Rx (Uplink)

**Frequency Band** 1760 – 1780 MHz

**Isolation, minimum** 28 dB

**License Band** AWS

**Total Group Delay, maximum** 60 ns

**Insertion Loss, typical** 0.45 dB

**Return Loss, minimum** 18 dB

## Electrical Specifications, Tx (Downlink)

**3rd Order IMD Test Method** 2 x 20 W CW tones

**3rd Order IMD, specific** -160 dBc

**Frequency Band** 2110 – 2150 MHz

**Isolation, minimum** 28 dB

**License Band** AWS

**Input Power, PEP, maximum** 1700 W

**Input Power, RMS, maximum** 120 W

**Total Group Delay, maximum** 30 ns

**Insertion Loss, typical** 0.4 dB

**Return Loss, minimum** 18 dB

## Electrical Specifications 2, Tx (Downlink)

**3rd Order IMD Test Method** 2 x 20 W CW tones

**3rd Order IMD, specific** -160 dBc

**Frequency Band** 2160 – 2180 MHz

**Input Power, PEP, maximum** 1700 W

**Insertion Loss, typical** 0.45 dB

**Isolation, minimum** 28 dB

**License Band** AWS

**Return Loss, minimum** 18 dB

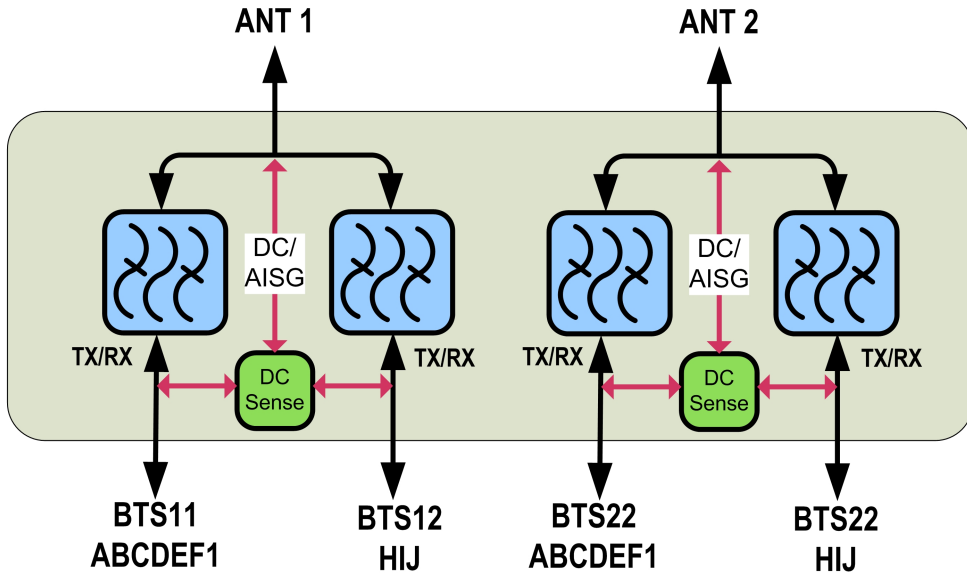
**Total Group Delay, maximum** 60 ns

## Electrical Specifications, AISG

Return Loss, minimum

12 dB

Block Diagram



Environmental Specifications

<b>Operating Temperature</b>	-40 °C to +65 °C (-40 °F to +149 °F)
<b>Ingress Protection Test Method</b>	IEC 60529:2001, IP67

Packaging and Weights

<b>Included</b>	Brackets
<b>Mounting Hardware Weight</b>	1.1 kg   2.425 lb
<b>Weight, without mounting hardware</b>	6.9 kg   15.212 lb