CBC1921Y-DS-2X | E15S07P39

Diplexer Stacked PCS/AWS 1-4, DC Sense, AISG Compatible 1.1-2.0

OBSOLETE

This product was discontinued on: December 31, 2018

Replaced By:

CBC1923T-DS-43 E14F05P33	Twin Diplexer PCS/AWS+WCS, dc Sense, 4.3-10

Product Classification

Product Type	Diplexer

General Specifications

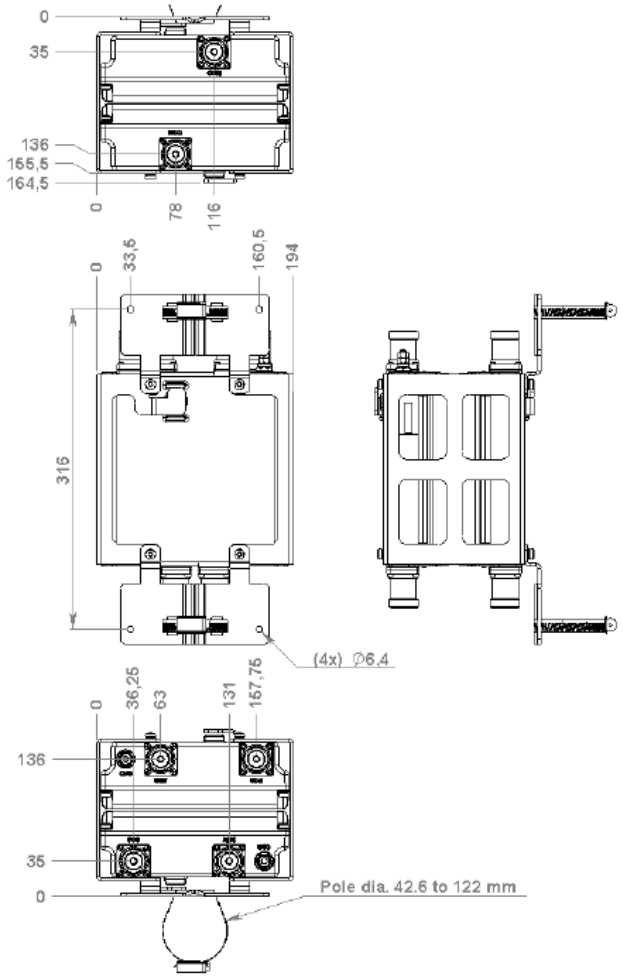
Product Family	CBC1921Y
Common Port Label	ANT
RF Connector Interface	7-16 DIN Female
RF Connector Interface Body Style	Long neck

Dimensions

Height	192 mm | 7.559 in
Width	194 mm | 7.638 in
Depth	140 mm | 5.512 in

CBC1921Y-DS-2X | E15S07P39

Outline Drawing



Electrical Specifications

Impedance	50 ohm
License Band, Band Pass	AWS 1700 | PCS 1900

Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through Method	Auto sensing
dc/AISG Pass-through, combiner	dc Sensing
dc/AISG Pass-through, demultiplexer	Branch 1 | Branch 2
Voltage	7–30 Vdc

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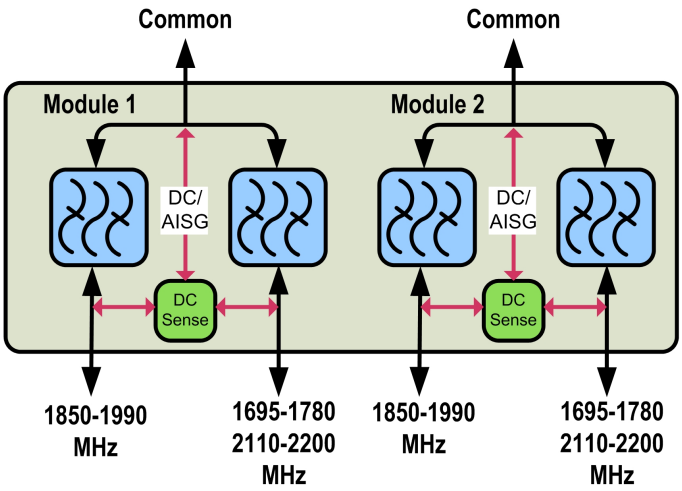
Electrical Specifications

Sub-module	**1 | 2**	**1 | 2**
Branch	1	2
Port Designation	AWS	PCS
License Band	AWS 1700, Band Pass	PCS 1900, Band Pass

Electrical Specifications, Band Pass

Frequency Range, MHz	**1695–1780 2110–2200**	**1850–1990**
Insertion Loss, maximum, dB	0.35	0.25
Insertion Loss, typical, dB	0.3	0.15
Total Group Delay, maximum, ns	25	25
Return Loss, minimum, dB	19	19
Return Loss, typical, dB	22	22
Isolation, minimum, dB	50	50
Isolation, typical, dB	53	53
Input Power, RMS, maximum, W	200	200
Input Power, PEP, maximum, W	3000	3000
3rd Order PIM, typical, dBc	-153	-153
3rd Order PIM Test Method	1 x 20 W AWS CW tone 1 x 20 W PCS CW tone	2 x 20 W CW tones

Block Diagram



Logic Table

Combining Mode Operation (Ground Based)			
RF Ports Input Voltage			
1850-1990MHz	**1695-1780 MHz 2110-2200 MHz**	**COMMON**	**DC/AISG Path Selection**
7 ≤ V ≤ 30	<7	<7	**1850-1990 MHz to COMMON "ON"** 1695-1780/2110-2200 MHz "OFF"
<7	**7 ≤ V ≤ 30**	<7	1850-1990 MHz to COMMON "OFF" **1695-1780/2110-2200 MHz to COMMON "ON"**
V<7 or V>30	V<7 or V>30	V<7 or V>30	ALL ports OFF

Splitting Mode Operation (Tower Top)			
RF Ports Input Voltage			
1850-1990MHz	**1695-1780 MHz 2110-2200 MHz**	**COMMON**	**DC/AISG Path Selection**
<7	<7	7 ≤ V ≤ 30	**ALL PORTS ON***
7 ≤ V ≤ 30	<7	7 ≤ V ≤ 30	ALL ports OFF (Verified at Start Up)
<7	7 ≤ V ≤ 30	7 ≤ V ≤ 30	ALL ports OFF (Verified at Start Up)
<7	<7	7 ≤ V ≤ 30	ALL ports OFF (Verified at Start Up)

*** DC/AISG will pass to both Band RF Ports, External DC blocks required for proper installation**

Environmental Specifications

Operating Temperature	-40 °C to +65 °C (-40 °F to +149 °F)

Packaging and Weights

Volume	5.2 L
Weight, net	7.5 kg | 16.535 lb