

#### Quad Diplexer 600AE/700LABC, DC sense, 4.3-10 Connectors

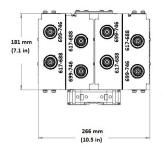
- BTS-to-feeder and feeder-to-antenna application
- New 4.3-10 connectors for improved PIM performance and size reduction
- Convertible mounting brackets

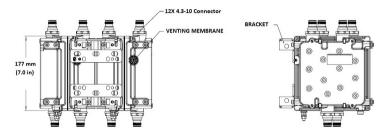
OBSOLETE This product was discontin Replaced By: E14F06P51	nued on: March 30, 2024 Quad Diplexer 617-698/703-960 MHz, 4.3-10 connectors		
Product Classification			
Product Type	Diplexer		
General Specification	INS		
Color	Gray		
Common Port Label	COMM		
Modularity	4-Quad		
Mounting	Pole   Wall		
Mounting Pipe Hardware	Band clamps (2)		
<b>RF</b> Connector Interface	4.3-10 Female		
RF Connector Interface Body	Style Long neck		
Dimensions			
Height	181 mm   7.126 in		
Width	266 mm   10.472 in		
Depth	177 mm   6.969 in		
Ground Screw Diameter	6 mm   0.236 in		

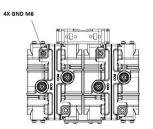
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## Outline Drawing







### **Electrical Specifications**

Impedance	50 ohm	
License Band, Band Pass	CEL 850   USA 600   USA 700   USA 750	
Electrical Specifications, Common Port		
Composite Power, PEP	250 W	
Electrical Specifications, dc Power/Alarm		
dc/AISG Pass-through Method	Auto sensing	
dc/AISG Pass-through Path	See logic table	
Lightning Surge Current	10 kA	

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Lightning Surge Current Waveform

8/20 waveform

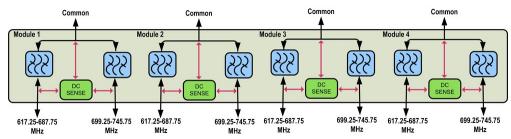
### Electrical Specifications

Sub-module	1   2   3   4	1   2   3   4
Branch	1	2
Port Designation	617-688	699-746
License Band	USA 600, Band Pass	USA 700, Band Pass

### Electrical Specifications, Band Pass

Frequency Range, MHz	617.25-687.75	699.25-745.75
Insertion Loss, maximum, dB	0.45	0.45
Insertion Loss, typical, dB	0.2	0.2
Total Group Delay, maximum, ns	75	70
Return Loss, typical, dB	22	22
Isolation, typical, dB	53	48
Input Power, RMS, maximum, W	200	200
Input Power, PEP, maximum, W	2000	2000
3rd Order PIM, typical, dBc	-161	-161
3rd Order PIM Test Method	2 x 20 W CW tones	2 x 20 W CW tones

#### Block Diagram



## Logic Table

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Combining M	ode Operation (Groun	d Based)	
RF Ports Input Voltage			
617.25 to 687.75 MHz	699.25 to 745.75 MHz	COMMON	DC/AISG Path Selection
7 ≤ V ≤ 30	<7	<7	617.25 to 687.75 MHz to COMMON "ON"
<7	7 ≤ V ≤ 30	<7	699.25 to 745.75 MHz to COMMON "ON"
7 ≤ V ≤ 30	7 ≤ V ≤ 30	<7	617.25 to 687.75 MHz to COMMON "ON"
Splitting Mode Operation (Tower Top)			
RF Ports Impedance DC (Load sensing)			
617.25 to 687.75 MHz	699.25 to 745.75 MHz	COMMON	DC/AISG Path Selection
open/load	short	7 ≤ V ≤ 30	COMMON to 617.25-687.75 "ON"
short	open/load	$7 \le V \le 30$	COMMON to 699.25-745.75 "ON"
open/load	open/load	7 ≤ V ≤ 30	ALL ports ON
short	short	$7 \le V \le 30$	ALL ports OFF

#### **Environmental Specifications**

-40 °C to +65 °C (-40 °F to +149 °F)
5%-100%
IEC 60068-2-11, 30 days
IEC 60529:2001, IP67

### Packaging and Weights

Included	Mounting hardware
Mounting Hardware Weight	0.5 kg   1.102 lb
Weight, without mounting hardware	10.7 kg   23.589 lb

#### Regulatory Compliance/Certifications

 Agency
 Classification

 ISO 9001:2015
 Designed, manufactured and/or distributed under this quality management system

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