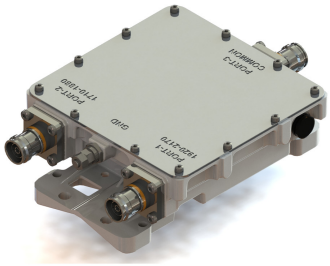
# E12F05P96



## Diplexer, DCS 1800/UMTS 2100, AISG compatible, dc pass on all ports with 4.3-10 connectors

- Industry leading PIM performance
- Designed for network Modernization, introduction of LTE1800 on existing site
- Designed for network Modernization, introduction of UMTS2100 on existing site
- New 4.3-10 connectors for improved PIM performance and size reduction
- dc/AISG pass-through on all frequency ports

## Product Classification

| | |
|---|---|
| **Product Type** | Diplexer |

## General Specifications

| | |
|---|---|
| **Product Family** | CBC1821 |
| **Color** | Gray |
| **Common Port Label** | PORT 3 COMMON |
| **Modularity** | 1-Single |
| **Mounting** | Pole \| Wall |
| **Mounting Pipe Hardware** | Band clamps (2) |
| **RF Connector Interface** | 4.3-10 Female |
| **RF Connector Interface Body Style** | Long neck |

## Dimensions

| | |
|---|---|
| **Height** | 149 mm \| 5.866 in |
| **Width** | 145 mm \| 5.709 in |
| **Depth** | 42 mm \| 1.654 in |
| **Mounting Pipe Diameter Range** | 40–160 mm |

## Outline Drawing

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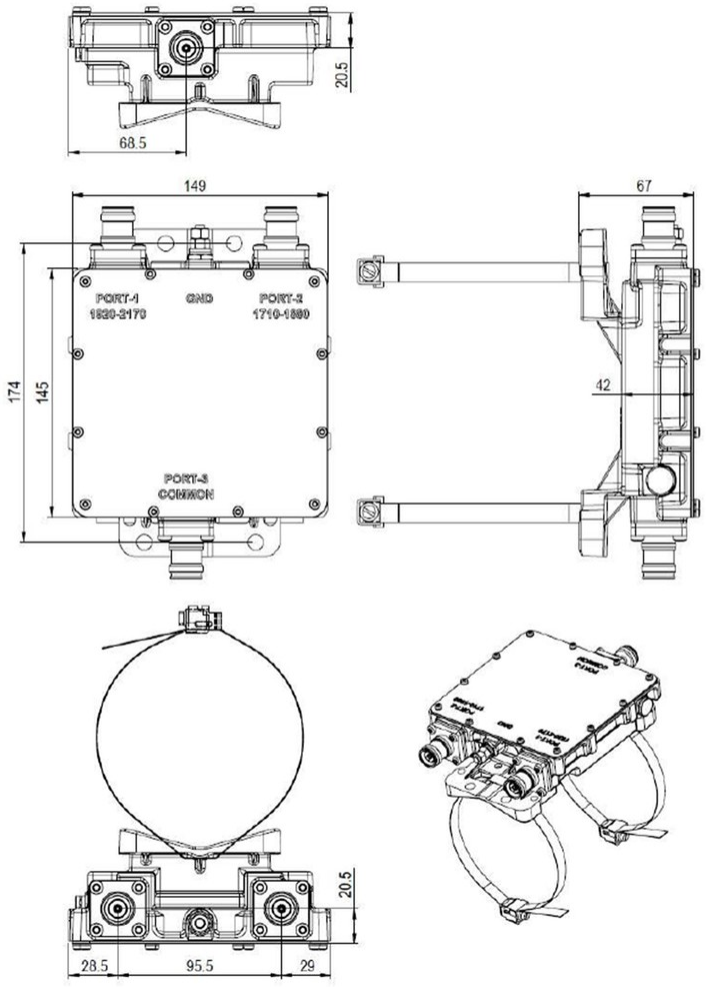


## Electrical Specifications

| | |
|---|---|
| **Impedance** | 50 ohm |
| **License Band, Band Pass** | DCS 1800 \| IMT 2100 |

## Electrical Specifications, dc Power/Alarm

| | |
|---|---|
| **dc/AISG Pass-through, combiner** | Branch 1 \| Branch 2 |
| **dc/AISG Pass-through, demultiplexer** | Branch 1 \| Branch 2 |
| **Lightning Surge Current** | 10 kA |
| **Lightning Surge Current Waveform** | 8/20 waveform |

## Electrical Specifications, AISG

| | |
|---|---|
| **AISG Pass-through Current, maximum** | 2 A |

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## Electrical Specifications

| | | |
|---|---|---|
| **Sub-module** | **1** | **1** |
| **Branch** | 1 | 2 |
| **Port Designation** | PORT 1 1710-1880 | PORT 2 1920-2170 |
| **License Band** | DCS 1800, Band Pass | IMT 2100, Band Pass |

## Electrical Specifications, Band Pass

| | | |
|---|---|---|
| **Frequency Range, MHz** | **1710–1880** | **1920–2170** |
| **Insertion Loss, typical, dB** | 0.15 | 0.25 |
| **Return Loss, typical, dB** | 20 | 20 |
| **Isolation, minimum, dB** | 50 | 50 |
| **Input Power, PEP, maximum, W** | 2500 | 2500 |
| **3rd Order PIM, typical, dBc** | -161 | |
| **3rd Order PIM Test Method** | Two +43 dBm carriers | |
| **7th Order PIM, typical, dBc** | | -168 |
| **7th Order PIM Test Method** | | Two +43 dBm carriers |

## Block Diagram

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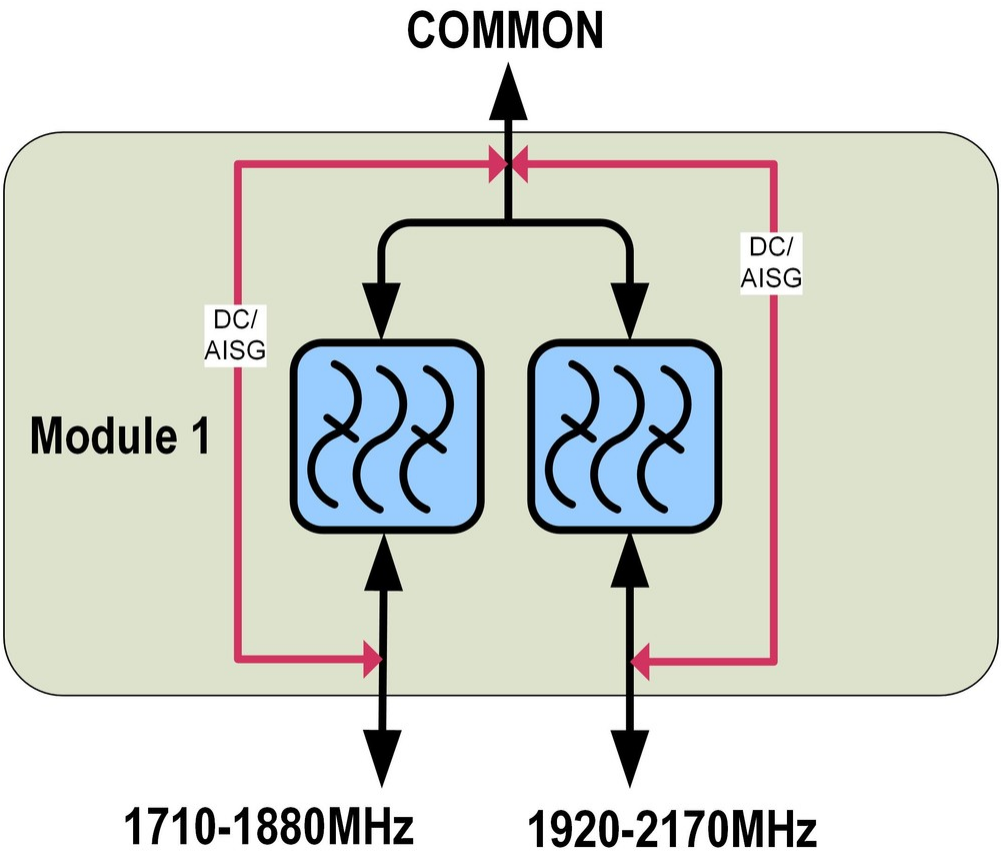


## Environmental Specifications

| | |
|---|---|
| **Operating Temperature** | -40 °C to +60 °C (-40 °F to +140 °F) |
| **Corrosion Test Method** | IEC 60068-2-11, 30 days |
| **Ingress Protection Test Method** | IEC 60529:2001, IP67 |

## Packaging and Weights

| | |
|---|---|
| **Included** | Mounting hardware |
| **Volume** | 0.9 L |
| **Weight, net** | 2 kg \| 4.409 lb |

## Regulatory Compliance/Certifications

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