

# DCI0010F1V1

## DC INSERTER

Designed to be deployed either indoor or outdoor to insert DC power or AISG OOK signals onto RF feeder cables in cellular base station systems, the DCI0010F1Vx has the following features and benefits:

### FEATURES

- Excellent PIM performance
- Wide frequency band of operation
- Indoor or outdoor use
- Excellent lightning protection



### TECHNICAL SPECIFICATIONS

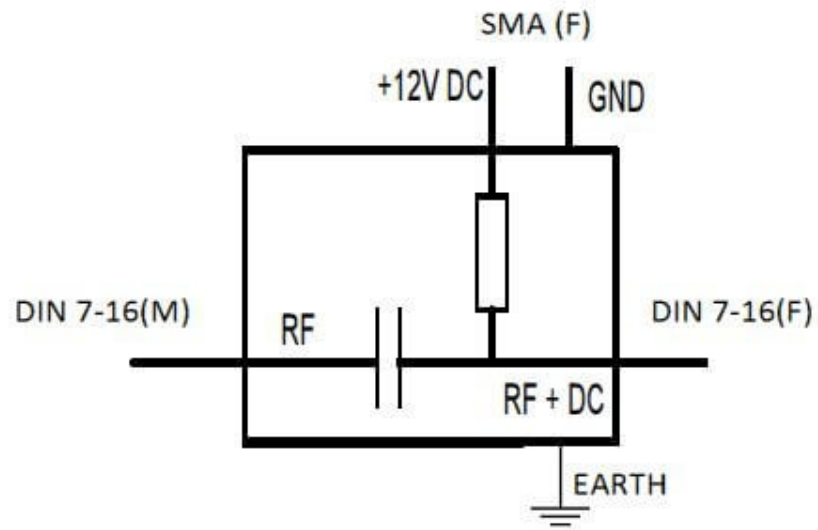
| RF                                                                      |                                                                                                               |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Passband                                                                | 698 - 2700MHz                                                                                                 |
| Return loss                                                             | 20dB minimum                                                                                                  |
| Insertion loss                                                          | 0.2dB maximum                                                                                                 |
| Maximum input power with no damage                                      | 200W (average) maximum                                                                                        |
| RF to DC port isolation                                                 | 50dB                                                                                                          |
| Intermodulation, passive                                                | <155dBc with 2 x 20W carriers                                                                                 |
| ELECTRICAL                                                              |                                                                                                               |
| RF impedance                                                            | 50ohms                                                                                                        |
| DC                                                                      |                                                                                                               |
| Voltage rating                                                          | +40V DC                                                                                                       |
| Current rating                                                          | 2.2A Continuous, 4A Peak maximum                                                                              |
| DC resistance DC input to feeder                                        | <0.5ohm                                                                                                       |
| Return loss 2.076 - 2.276MHz                                            | 15dB minimum V3 and V4 versions only                                                                          |
| Insertion loss 2.076 - 2.276MHz                                         | 0.7dB maximum V3 and V4 versions only                                                                         |
| ENVIRONMENTAL                                                           |                                                                                                               |
| For further details of environmental compliance, please contact Kaelus. |                                                                                                               |
| Temperature range                                                       | -40°C to +65°C   -40°F to +140°F                                                                              |
| Ingress protection                                                      | IP67                                                                                                          |
| Lightning protection                                                    | DC port = 2KA IEC 61000-4-5 8/20us waveform<br>RF ports = 10KA IEC 61000-4-5 8/20us waveform multiple strikes |
| MTBF                                                                    | >500,000 hours                                                                                                |
| MECHANICAL                                                              |                                                                                                               |
| Dimensions H x D x W                                                    | 55 x 95 x 40mm   2.16 x 3.74 x 1.57in                                                                         |
| Weight                                                                  | 0.7kg   1.54lbs                                                                                               |
| Connectors                                                              | 1 x DIN 7/16(M), 1 x DIN 7/16 (F), DC/AISG passed to either connector; see ordering information for details   |
| Connector 1                                                             | DC in = SMA female                                                                                            |
| Protective earth                                                        | M6 stud                                                                                                       |

### ORDERING INFORMATION

| PART NUMBER | DESCRIPTION                                         |
|-------------|-----------------------------------------------------|
| DCI0010F1V1 | DC Inserter, DC through/from 7/16(F) connector      |
| DCI0010F1V2 | DC Inserter, DC through/from 7/16(M) connector      |
| DCI0010F1V3 | DC Inserter, DC/AISG through/from 7/16(F) connector |
| DCI0010F1V4 | DC Inserter, DC/AISG through/from 7/16(M) connector |

| OPTIONAL ACCESSORIES |                                                        |
|----------------------|--------------------------------------------------------|
| PART NUMBER          | DESCRIPTION                                            |
| R18-0731             | Cable assembly - PDU to Bias-T SMA to SMA 5m           |
| R18-0732             | Cable assembly - PDU to Bias-T SMA to SMA 10m          |
| R18-0810-x           | Cable assembly - PDU to Bias-T Molex 2 way to SMA "x"m |

## ELECTRICAL BLOCK DIAGRAM



## MECHANICAL BLOCK DIAGRAM

