

## DDF9007F1V1-1

### | GSMR900 DUAL DUPLEX FILTER



Dual Duplex GSM-R filters are two port units with the ability to simultaneously pass both uplink and downlink GSM-R signals

### PRODUCT FEATURES

- Designed for GSM-R cab radio use
- Suitable for indoor applications
- Narrow guard band
- Provides high level of rejection to adjacent EGSM900 uplink and downlink

### TECHNICAL SPECIFICATIONS |

#### | DOWNLINK (TX) PATH

Frequency band	918-925MHz
Bandwidth	7MHz
Insertion loss	2.0dB max band-edge, 1.0dB typical mid-band
Return loss, all ports	20dB min
Continuous average power	20W max

#### | UPLINK (RX) PATH

Frequency band	873-880MHz
Bandwidth	7MHz
Insertion loss	2.0dB max band-edge, 1.0dB typical mid-band
Return loss, all ports	20dB min
Continuous average power	20W max

## TECHNICAL SPECIFICATIONS CONTINUED |

### | REJECTION CHARACTERISTIC (PORT 1 TO PORT 2)

DC – 872MHz	40dB min
882 - 917MHz	40dB min
925.5 - 926.2MHz	30dB min
926.2 - 930MHz	40dB min
930 - 2700MHz	50dB min

### | ELECTRICAL GENERAL

Impedance	50ohms
Intermodulation	< -150dBc (in uplink band, 2x 20 W carriers)

### | ENVIRONMENTAL

For further details of environmental compliance, please contact Kaelus.

Operating temperature range	-25°C to +70°C   -13°F to +158°F, EN 50155, 4.1.2, T3
Ingress protection	IP54
Altitude	1,400m   4,600ft, EN 50125.1 sub clause 2, Class AX.
MTBF	>1,000,000 hours
Compliance	EN 50155 4.1.3 shock and vibration EN 50155 4.1.4 relative humidity EN 50121-3-2 EMC rolling stock EN 45545 Fire Protection on Railway Vehicles ETSI 300-019-2-1 Storage and Transport Environmental RoHS

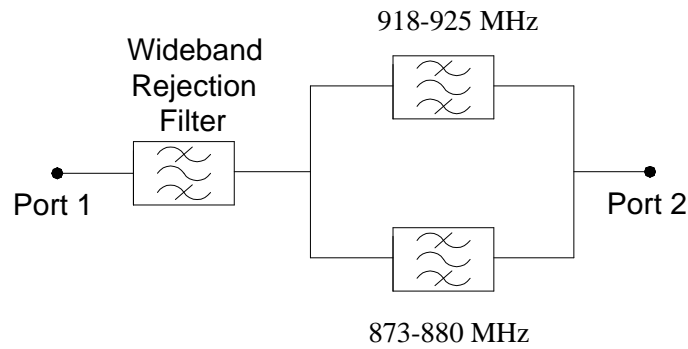
### | MECHANICAL

Dimensions H x D x W	350 x 350 x 150mm   13.78 x 13.78 x 5.9in
Weight, (kg   lb)	15.0kg   33.1lbs
Connectors	N-type (F) x 2
Mounting	Customer specific, includes grounding post

## ORDERING INFORMATION |

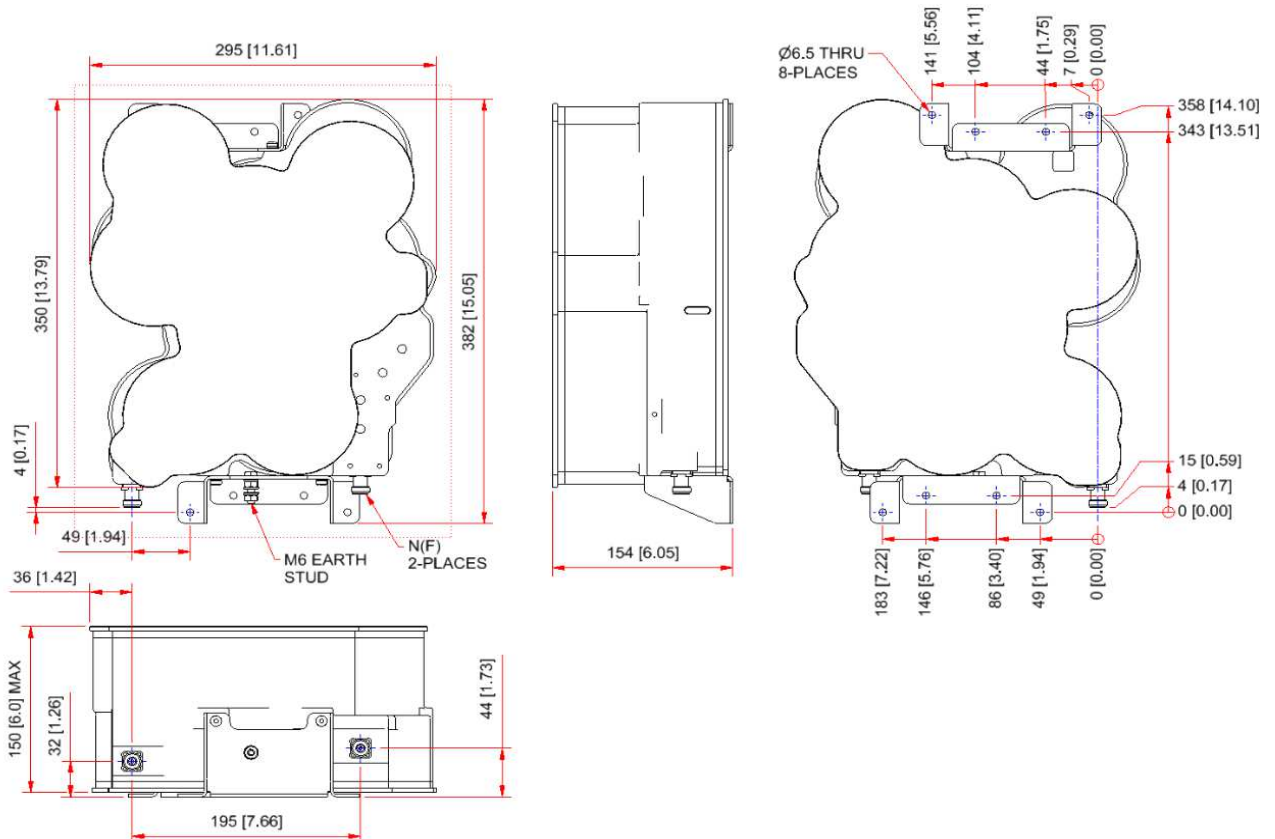
Kaelus Part Number	Kaelus Description
DDF9007F1V1-1	GSMR900 Dual duplex filter
DCI9001F1V1-1	DC Injector
SWT9001F1V1-1	Switch assembly for DDF9001F1V1-1
GSR0001F1V1-1	System including DDF9007F1V1-1 and SWT9001F1V1-1

## ELECTRICAL BLOCK DIAGRAM |



## MECHANICAL BLOCK DIAGRAM |

Note: maximum dimension shown. The unit size and connector location may change during the development process. Confirmation of the mechanical dimension will be provided as soon as possible.



Information contained within this datasheet is valid at the time of release and may be reviewed by Kaelus at any time.