# Dual Circular Polarized Reflector Feed





# SOLUTION FOR

- Reflector feed for ground station transmitter
- Simultaneous TX/RX in dual circular polarization

# Main features

#### Technical performance

- Dual circular polarization (LHCP/RHCP)
- Constant gain over frequency
- Smooth radiation pattern with low sidelobes

#### Design

- Low blockage for onset reflectors
- Circular corrugated radiating section
- Integrated septum polarizer
- Resists harsh environmental conditions

# Surface treatment

- Surtec 650 according to MIL-C 5541E class 3
- White polyurethane paint

## Repeatability

- Stiff and robust mechanical design
- Precision pins for accurate polarization alignment
- Precision machined
- High reliability coaxial connectors

#### **Delivered documents**

- $\bullet$  Typical performance data (TYMEDATM)
- Measured return loss data and port-to-port coupling

# Product configuration

# **Equipment**

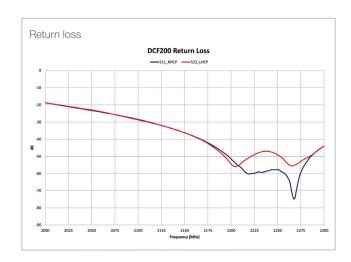
■ Integrated thermal housing with radome

#### **Related services**

- □ Calibration and maintenance
- Customization

### **Electrical characteristics**

| Communicated food borns |
|-------------------------|
| Corrugated feed horn    |
| 2 – 2.5 GHz             |
| Dual circular           |
| 9 dBi                   |
| < 1.2                   |
| < -20 dB                |
| 20 – 30 dB              |
| 50 Ohms                 |
| 150 W                   |
|                         |



### **Mechanical characteristics**

| Part number           | DCF200                    |
|-----------------------|---------------------------|
| Dimensions            |                           |
| W=H                   | 200 mm                    |
| L                     | 360 mm                    |
| Weight (approx.)      | 3.6 Kg                    |
| RF connectors         | N-type Female             |
| Materials             | Aluminum, PTFE            |
| Treatment             | Surtec 650 <sup>(1)</sup> |
| Color                 | White                     |
| Mounting interface    | Collar mounting           |
| Wind rating           | > 20 m/s                  |
| Operating temperature | -45° C - +50° C           |
|                       |                           |

(1) According to MIL-C 5541E class 3

