

# ManPak<sup>®</sup>T C100FM, C100FA

## *Next Generation Flyaway Terminal*



Simple manual or automated satellite acquisition

Waterproof and rugged design for harsh environments

Award winning GUI and setup time of less than 5 minutes

Lightweight, and IATA compliant for easy transportation in 1-2 cases

### **Overview**

The General Dynamics SATCOM Technologies innovative ManPak<sup>®</sup>T line leads the way in the next generation of flyaway terminals. Available in 60cm to 1.0m reflector sizes, this tripod antenna line features simple manual or automated satellite acquisition; an award winning GUI; and a range of optional extra features.

ManPak<sup>®</sup>T is lightweight, and IATA compliant allowing for ease of transportation. The completely waterproof and rugged design allows for operation in even the most challenging of conditions, be that in a war zone for military communications; capturing breaking news stories from the front line; or distributing CCTV from remote locations on international borders.

### **Features**

- High performance carbon fiber segmented antenna
- Assisted, fast acquisition via award-winning GUI (C100FA)
- Lightweight, IATA compliant
- Packs into one case (two cases for the C100FA)
- Ka, Ku & X-band
- Set up time less than 5 minutes
- ITAR free
- C100FA includes a clip-on auto pointing pack

## External Interfaces

- BUC Tx RF
  - N Type
- BUC Rx RF
  - N Type
- Ethernet
  - Weatherproof RJ45
- AC Power Input
- DC Power Input
- RF Monitor
  - N Type

## Control

- Web Browser Setup
- Simple highly intuitive interactive user interface (optional)
  - 3.5" Digital TFT-LCD 640x480 Display
  - Colorful Graphical User Interface
  - Two Button Control

## Electrical, Ka-Band

- Frequency (GHz)
  - Transmit: 29.5 to 30
  - Receive: 19.2 to 20.2
- Polarization
  - Circular
- Tx Gain
  - Transmit: 46.6 dBi
- Rx Gain
  - Receive: 42.5 dBi
- G/T @ 19.95 GHz
  - 19 dBk

## Electrical, Ku-Band

- Frequency (GHz)
  - Transmit: 13.75 to 14.5
  - Receive: 10.95 to 12.75
- Polarization
  - Linear
- Tx Gain
  - Transmit: 41.4 dBi
- Rx Gain
  - Receive: 39.2 dBi
- G/T @ 11.85 GHz
  - 19.1 dBk

## Electrical, X-Band

- Frequency (GHz)
  - Transmit: 7.9 to 8.4
  - Receive: 7.25 to 7.75
- Polarization
  - Circular
- Tx Gain
  - Transmit: 36.6 dBi
- Rx Gain
  - Receive: 35.6 dBi
- G/T @ 7.5 GHz
  - 15.7 dBk

## Power

- Input voltage range
  - 90 to 260VAC (50/60 Hz) or 11 to 36 VDC

## Mechanical/Physical

- Reflector
  - Segmented and solid options
- Segmented
  - 6 pieces
- Surface Accuracy
  - Better than 0.25mm rms error
- Antenna Weight
  - 70.5 lbs.(32 kg)
- Packaging
  - Single IATA compliant cases

## Alignment - C100FA

- The powerful on board controller allows for highly intuitive, graphical user interface experience to deskill the operation of locating and acquiring the desired satellite. The system utilizes the built in GPS, compass and inclinometer sensors in combination with information obtained from the optional beacon receiver, to provide data to the controller. The pointing information is presented in a user friendly way on the display to provide the user with a simple means of satellite alignment.