



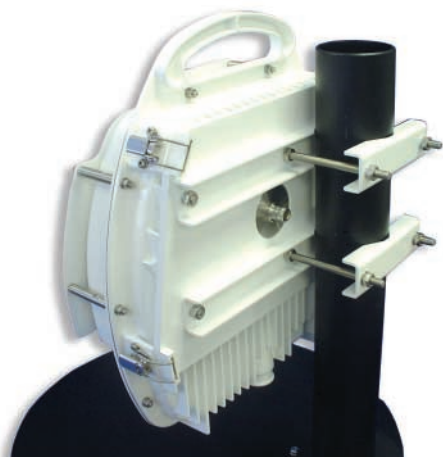
# CBACS

## C-Band Communication System

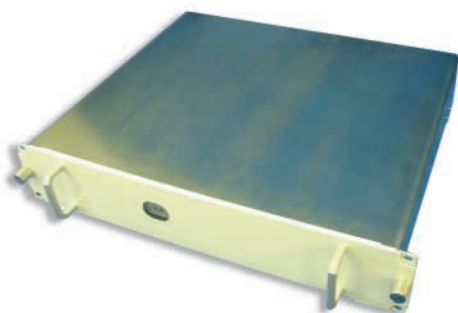
- Uses include military UAV, helicopter and terrestrial applications
- Key Features
  - Long Range
  - Low Latency
  - Excellent Security
- Ranging feature accuracy better than 15 metres
- Fully duplex digital telemetry link, multiple channel with in flight selection
- Secure video down link
- Direct Sequence Spread Spectrum (DSSS) modulation on data uplink
- Forward error correction on transferred data
- High resolution, colour or monochrome, low-latency, scrambled video
- Jamming resistant
- Stealth features
- Compact - low airborne and ground remote mast-mounted mass
- Mini Ground Control Station (GCS) applications
- Built-in Test (BIT) with continuous background monitoring
- Ground stations may be co-located

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### GROUND TRANSCIVER (GNTC) OUTDOOR UNIT



### GROUND TRANSCIVER (GNTC) INDOOR UNIT



### AIRBORNE TRANSCIVER (ANTC) UNIT



#### UPLINK

Frequency Band:	Lower C-Band
Modulation (Selectable):	Constant Envelope DSSS or Narrowband
Data Rate (Gross):	47 kbits/s
Bit Error Rate:	Better than $10^{-6}$ at specified sensitivity
Forward Error Correction:	Reed-Solomon
Transmitter/Receiver Characteristics:	Excellent

#### DOWNLINK

Frequency Band:	Upper C-Band
Modulation:	Single Carrier, High Modulation Index FM
Data Rate (Gross):	47 kbits/s; up to 4 Mbits/s without video
Bit Error Rate:	Better than $10^{-6}$ at specified sensitivity
Forward Error Correction:	Reed-Solomon
Transmitter/Receiver Characteristics:	Excellent

#### INTERFACES

Data/Control/Status:	RS 422 (Asynchronous)
Video:	Differential 1 V (P-P)

#### PHYSICAL CHARACTERISTICS

Mass:	
ANTC	8 Kg
GNTC (Mast)	11 Kg
Dimensions:	
ANTC	300 mm x 210 mm x 160 mm (h x w x d)

#### POWER REQUIREMENTS

Airborne Node	
Transceiver (ANTC):	Nominal 27,5 V DC <240 W
Ground Node	
Transceiver (GNTC):	Nominal 27,5 V DC <90 W

#### POWER REQUIREMENTS

Temperature (ANTC):	-20°C to +55°C
Temperature (GNTC):	-15°C to +50°C

Tellumat Defence  
A Division of Tellumat (Pty) Limited  
64-74 White Road, P O Box 30451, Tokai 7966, South Africa  
Tel. +27 (0)21 710 2911, Fax: +27 (0)21 710 2350  
E-mail: avionics@tellumat.com  
Web: http://www.tellumat.com

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