

## Comet - the safe way to down a plane!

Comet is a radio-linked remote-stop or flight termination system with digital, pyrotechnic, CAN-FD, serial, and Ethernet outputs.

Designed to ensure no single failure shall cause termination, Comet comes with dual redundant processing and redundant termination circuits.



### Many Output Options

Comet Air has two termination outputs which can be independently configured for positive-logic digital or pyrotechnic ignition function. Termination voting can happen internally or externally, and the output can optionally be latched and held-up for a short period of time.

Both Comet Air and Ground come with dual Ethernet or dual CAN-FD telemetry links which can be used as a soft source of termination information and source of system diagnostics.

### Adaptable RF Link

A socketed radio solution allows Comet to support many popular bands from 400 MHz to 2.4 GHz and transmit power of up to 4 Watts. Licensed and unlicensed variants are available depending on the country of operation.

In the standard configuration, a single Air unit supports up to two Ground units in line-of-sight operation. Mesh and repeater options allow beyond-line-of-sight operation and range extension. Protocol extensions allow up to eight Ground units.

### Untethered Operations

The Comet Ground unit comes standard with an 8-hour battery, neck lanyard, daylight visible LEDs and a loud buzzer; allowing range safety officers to operate from any location.

### Custom Software

An open-platform C++ SDK allows the Comet FTS to be configured to your exact needs.

## Specifications (Air Unit)

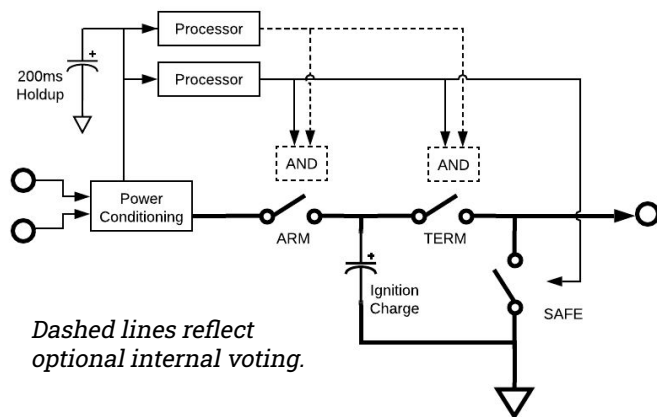
<b>Input Voltage</b>	18 to 30V (nominal) DO-160G 16.6 Cat B
<b>Power</b>	5W (nominal)
<b>Weight</b>	375g
<b>Environmental (DO-160G Qualified)</b>	-40 to 70°C (Operating) -5k to 25kft MSL Category B Temp. Variation Category A Op. Shock Category R Vibration
<b>Connector</b>	J1: EN-4165, 20 Pin, Male J2: 50 Ohm TNC
<b>Terminate Current (Digital Option)</b>	100mA Sustained (200ms Holdup)
<b>Terminate Energy (Pyrotechnic Option)</b>	260mJ
<b>Communications</b>	Option 1 Dual 10/100 Ethernet Single RS-232 Option 2 Single 10/100 Ethernet Dual CAN-FD Single RS-232

## RF Performance

Band	TX Power (W)	Sensitivity (dBm)	Range (km)
400 MHz	2	-114	110
840 MHz	2	-113	50
866 MHz	1	-114	35
869 MHz	0.5	-112	20
900 MHz	1	-110	20
2.4 GHz	1	-112	10

Range is an estimate and assumes clear line of sight, uniform radiation patterns, 1km receiver altitude, 20dB link margin, and default link rates, bandwidths, and error correction. Real world performance depends on many additional factors.

## Single Lane Termination Output



## Mechanical Outline (Air Unit)

