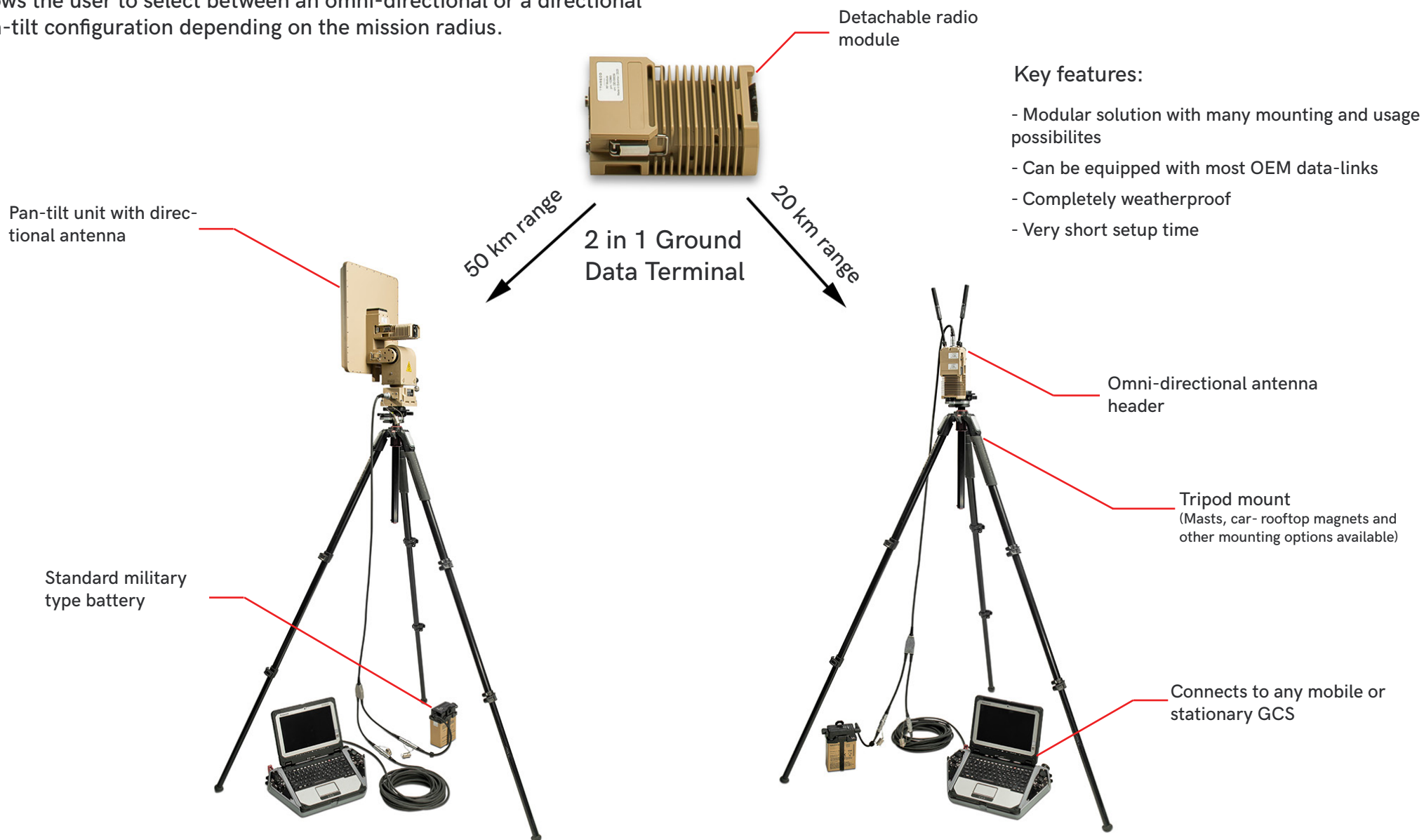


GDT50

The GDT50 Ground Data Terminal is a novel 2-in-1 solution, which allows the user to select between an omni-directional or a directional pan-tilt configuration depending on the mission radius.

THREOD
SYSTEMS



GDT50 Specifications



GDT50 set

Radio module	
Frequency range	2200-2500MHz ¹
Max TX power	4W (36dBm)
Waveform	Mobile Networked MIMO (MN-MIMO)
Modulation	BPSK, QPSK, 16-QAM, 64-QAM
Channel Bandwidth	5/10/20 MHz
Encryption	AES256
Tuning step size	1kHz
Data rates	100+ Mbps
No. of RF channels	2
Features	Spatial Multiplexing, Space-Time Coding, TX Eigen Beamforming, RX Eigen Beamforming
Physical interface	32pin pogo-pin connector (data) 2x BMA connectors (RF)
Signaling interfaces	Ethernet, USB 2.0, GPIO, RS232, analog (speaker, microphone)
Directional tracking antenna configuration	
Components	2-axis pan-tilt module, directional antenna module, radio module, battery with UPS, cables
Range of movement (azimuth)	Azimuth: 360°, continuously Elevation: -10° to +90°
Angular velocity (azimuth)	Azimuth: 0.07°/sec to 50°/sec Elevation: 0.07°/sec to 40°/sec
Position accuracy	≤ ±2mrad
Antenna gain	19dBi
Polarization	Dual, slant-polarized
Maximum Range	50km RLOS
Weight	7.3kg
Dimensions	500 x 370 x 215mm (H x W x L)
Mounting options	Tripod, lightweight mast system (Rolatube, Cobham TR86)
Supply Voltage	20-33 VDC
Power Consumption	60W peak, 30W nominal
Physical interface	Lemo K series connector (EGG.2K.310)
Signaling interface	Ethernet

Omnidirectional antenna configuration	
Components	Omnidirectional antenna adapter, radio module, omni-directional antennas, battery with UPS, cables
Polarization	Vertical
Antenna gain	2.15dBi
Maximum Range	20km RLOS
Weight	1.15kg
Dimensions	190 x 80 x 50mm (H x W x L)
Mounting options	Tripod, lightweight mast system (Rolatube, Cobham TR86), backpack
Supply Voltage	20-33 VDC
Power Consumption	24W peak, 10W nominal
Physical interface	Lemo K series connector (EGG.2K.310)
Signaling interface	Ethernet
Environmental	
Operating Temperature	-20 °C to +50 °C
IP rating	IP65
Standards	
Environmental	MIL-STD-810G
Features	
Radio module can be used in an omnidirectional radio set-up (mobile, close-range) or in a directional tracker set-up (long-range)	
Integrated 8MP camera provides POV of the target with tracker set-up	
Integrated GPS receiver for automatic antenna tracking	
API support for integrating with third party software	
Equipment can be powered with standard BB-2590 battery	
Modular design allows for easier future upgrade (other datalink options)	

Note! Other datalink options available. Other frequency ranges supported on request, contact Thred for options and quotations



Note! GDT50 range can be further enhanced by using various masts. Contact Thred for options and quotations.