



GTA-17/58-A

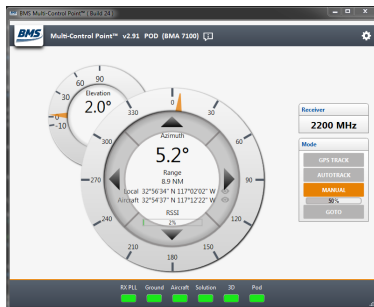
Portable GPS/RF Tracking Antenna

> Applications

- Public Safety
- Government Surveillance
- UAV
- Forward ATC

> Benefits

- Designed for Use with Customer Supplied Receivers
- Improved MCP+™ Windows Application
- Integrated BMRT Tracking Receiver
- Automatically Tracks Aircraft Using GPS Data or RF Auto-Track Methods
- Self Calibrating
- Secondary “Up-look” Antennas for Overhead Coverage
- Easy to Use
- Compact Size



Multi-Control Point+™ software is the user interface for the GTA-17/58-A. MCP+ software displays direction to the aircraft being tracked and tracking status. The antenna may be manually steered from the software, or automatic tracking may be selected. Antenna selection (uplook or steerable) may be made manually or under automatic control. Multiple GTA and TTA model antennas can be controlled from a single instance of the MCP+

The control PC requires a serial port, a USB-to-Serial adapter or an Ethernet connector to each antenna under control.



BMRT-4B Tracking Receiver

> Features

The tri-band GTA-17/58-A antenna is an updated version of a dependable design. Featuring a re-imagined software GUI, the Multi-Control Point+™ has added features and a fresh new look. The addition of the BMRT dedicated tracking receiver makes the “+” version completely agnostic as to receiver. Using the BMRT to develop the tracking error eliminates the most difficult obstacle to error-free pseudo-monopulse tracking. Designed to track a signal source either from GPS data or by locking onto the RF signal. The GTA-17/58 is to be used with a customer supplied receiver. The GTA-17/58 antenna comes with Multi-Control Point+™ software allowing control of multiple GTA/TTA Series antenna combinations. The GTA-17/58+ antenna uses BMS’s Common GTA Antenna Interface.

The addition of the tracking receiver makes the GTA-17/58 Tracking Antenna completely agnostic as to waveform or receiver used. Selectable bandwidths of 1, 2, 10, and 27 MHz service nearly all downlink receivers. Receiver configuration and control is accomplished by a PC running the BMS Multi-Control Point (MCP+) Windows application.

The GTA-17/58-A is enclosed in a radome which includes a GPS receiver/antenna, flux gate compass, steerable microwave antennas and two uplook microwave antennas. The steerable microwave antenna tracks continuously in 360° Azimuth. The fairly narrow beam width has much higher gain which results in increased range. The uplook microwave antenna is omni-directional and optimized for nearby operation and is used when the aircraft is at close range or directly overhead.

The GTA-17/58 may be tripod mounted or mast mounted for portable applications.

Antenna Characteristics	Primary	Uplook
Travel	360 degrees AZ, continuous rotation	Fixed
Tracking Rate	20 deg/second	Fixed
Polarity	Vertical/linear	RHC
Gain	See table below	9dBi
Beamwidth	See table below	AZ/EL, 90x90 degrees

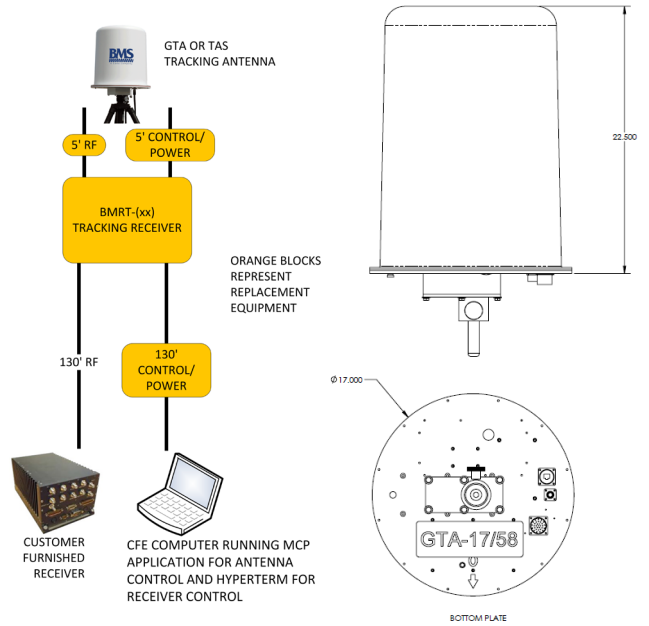
Connectors	Primary
RF	Type N (f)
Control	Mates with PT06E-22-325 (SR)
Ethernet	RJ-45

Physical	
Size	17" dia. x 22.8" tall (43.18 x 57.92 cm)
Weight	23 lbs. typical (10.43 kg)
Voltage	28 VDC @ 2A
Operating Temp	-20 to +60 degrees C
Wind Load	90 MPH operate, 90 MPH survive
Beamwidth AZ/EL (degrees)	27/60
Color	White (other colors available)

BMRT-4B Tracking Receiver	
Tuning Step Size	250 kHz, 1 MHz (others available)
Band Width	Adjustable 1, 2, 10, 27 MHz
Frequency Stability	± 2.5 ppm
Operating Bands	L/S/C1/C2
Configuration/Control	Connection with MCP™ Windows® App
RF Impedance	50 ohm, 1.5:1 VSWR
RF Connector	N(f) input, N(f) output

Band	Frequency (MHz)
L	1710-1850
S	2200-2500
C1	4400-5000
C2	5250-5850

RF Characteristics	L-band	S-Band	Low C-Band	High C-Band
Frequency	1710-1850 MHz	2200-2500 MHz	4400-5000 MHz	5250-5850 MHz
Return Loss	>14dB	>14dB	>14dB	>14dB
Impedance	50 ohms	50 ohms	50 ohms	50 ohms
Connector	N female	N female	N female	N female
Gain	12dBi	14dBi	18dBi	18dBi
Beamwidth AZ/EL (degrees)	27/60	24/40	10/20	8/15



Ordering Information	
GTA-17/58-A	8713788810
MCP+ Control Application	130099196
BMRT-4B Tracking Receiver	8014981400
BPS-GTA-28, 2RU 19" RM AC power supply	8714379000
Tracking System Factory Test and Align	903010000
Short Control Cable, 5'	7314643005
Long Control Cable, 130'	7314643130
Short RF cable, 5'	7310118005
Long RF cable, 130'	7310118130
BTA-110 Medium Duty Tripod	4014100900
Transit Case, GTA-17/58	250000056
Transit Case, BTA-CASE1, tripod	250000050
Portable Mast System, 30'	Contact Factory
Kit; Convert GTA-17/58 to -A version	8713788801
GTA-17/58-RT; Tri-Band Receive/Transmit Antenna (contact factory)	8713788732

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