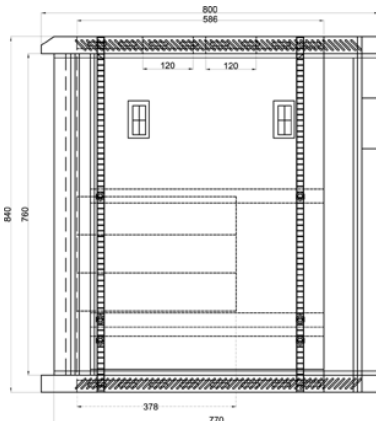
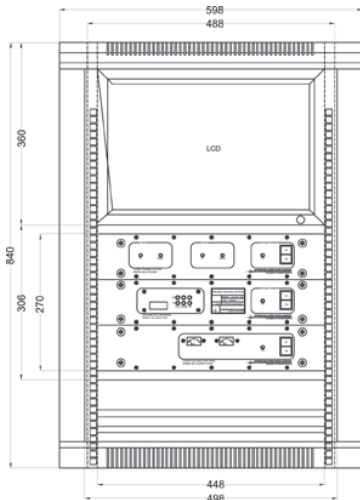


GCS-1200 Portable Ground Control Station

The GCS-1200 consists of:

- 17" LCD video display screen.
- Rack mounted power distribution bus.
- Rack mounted Ground data receiver with data decoder (see separate specification sheets).
- Rack mounted antenna tracking system motor driver unit.
- Laptop PC for data and Moving Map Display

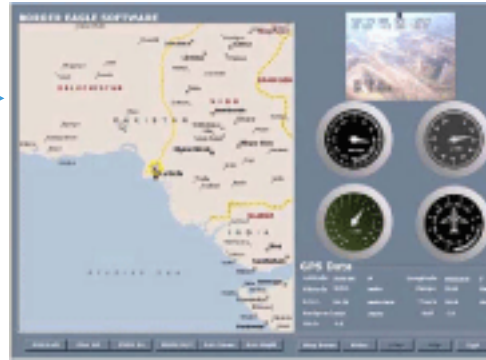


The GCS-1200 ground control station comprises of a Laptop PC, a 17" active matrix LCD display, the ATPS-1200 AZ/EL antenna pedestal, IDT-1200 heavy duty tripod assembly, and the ATS-1200 pedestal controller. The rugged system was developed to be transported in a HMMWV or a Land Rover type vehicle.

The GCS-1200 is designed as portable, and lower cost, alternative to the larger GCS-2000 Ground Control Station. It allows BVR operation of UAV's out to ranges of 100 km (based on antenna and data link selection options). Operation is through a 1.5-2 KVA portable generator set. Pneumatic clamps are provided for lifting and transportation. The system includes a GCR-1300 receiver for data downlinks. Frequency bands from 1.2 GHz to 2.4GHz can be accommodated. Multi-band operation is also available.

The ATP-1200 pedestal provides continuous 360' coverage in azimuth and -5 to +95 degrees in elevation. A Run/Safe switch is provided for safety. Synchro resolvers provide position feedback to the controller. Connections to the power supplies and the antenna pedestal are through two umbilicals.

The controller for the system is a 19" rack mounted ATS-1200 controller. The controller provides front panel control and monitoring of the system, with remote control via serial port optional. The controllers can be used to manually point the antenna with a joystick, or go to a pointing vector commanded by the remote serial link (GPS tracking) in the 'Auto Track' mode. The system is provided with a ground display PC-based software package and laptop computer which provides aircraft track over GIS/GPS data interfaces as well as live video from the UAV.



BEAGLEVIEW® Screen Shot

Specifications	
Driver Unit	
Size	19" Rack mount
Weight	10 lb.
Lamps	Power, Motor and switch status.
Power Input	115 VAC, 50 - 60 Hz @ 1 Amp. Or 28 VDC, @ 17 amps.TV Type
Motor Port	9 Pin Molex female.
CPU Port	36 Pin Centronics female.
Drive Type	Uni-polar Chopper
Motors	
Size	NEMA Frame # 34, 3.4" diameter, 3.75" long,
Shaft	0.375" diameter,1.25" long.
Mounting	4 Holes, 2" diameter, 2.739" square pattern.
Weight	80 ounces.
Windings	Unipolar, 3 volt, 4 amp.
Connector	9 pin male Molex.
Cable	9 conductor, 18 AWG.
Full step	1.8 degrees, +/- 5% accuracy.
Half step	.9 degrees, +/- 5% accuracy.
Detent Torque	1 oz / in.
Holding Torque	400 oz / in.