Satellite Ground Telemetry, Tracking & Control Station (TT&C)

Services Provided:

- UHF Satellite communication and tracking
- Telemetry download and analysis
- Image download, capture, and storing
- Create satellite plan using satellite control server
- Doppler shift measurement and automatically tracking of downlink frequency
- Communication link security protocols implementations
- GPS data receiving and system synchronization
- Ground control station communication system

Facilities Available:

- Vector network analyzer (up to 18GHz, 4 ports)
- Spectrum analyzer (9GHz, Pre-amplifier, Noise figure measurements)
- Space inventor GND2 UHF transceiver based on CSP protocol with 50Watts output power
- MS100 Gomspace Telemetry server (connected through network to client and GS100 or GS2000)
- GS100 Gomspace UHF based on CSP protocol 25Watts output power, supports (FSK, GFSK,MSK)
- GS2000 Gomspace S-band based on CSP protocol 25Watts output power supports (FSK, GFSK,MSK)
- Noise Source (10MHz to 18GHz)
- Other measurement tools (Oscilloscope - ...etc)

Samples from our Projects / Products:

- GCS software for CubeSat and Micro-satellites (NARSSCube-1&2, NExSat-1, EgSACube-3, etc.…)
- Satellite control software CubeSat and Micro-satellites (NARSSCube-1&2, NExSat-1)
- Telemetry software for CubeSat and Micro-satellites (NARSSCube-1&2, NExSat-1, EgSACube-3)
- Time synchronization module based on NTP server
- Antenna control software for antenna subsystem program tracking

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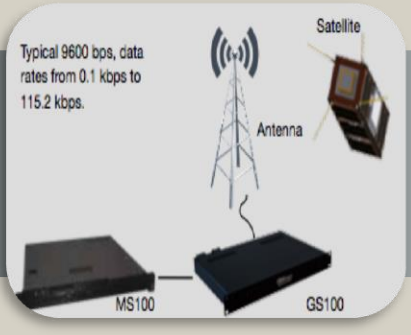
Global Online Education Website:
egsa-space-technology-portal.com

Part of our Facilities / Services:

GND-2 is a ground station for the TTC-P3 satellite radio. It is a more powerful version of the TTC-P3 with 200-Watt output power, designed to accommodate difficult uplink situations in noisy environments. With the built-in Linux computer, all that is needed is power and Ethernet.



Complete UHF/VHF ground station
Two independent receivers reduce polarization loss independent of satellite orientation. The ground station can be completely controlled/operated over Ethernet/Internet.

S-band ground station radio
This solution was used for high speed space-to-ground link for the GOMX4-satellites.

USRP X310 high-performance user-programmable FPGA
high-performance, scalable software defined radio (SDR) platform for designing and deploying next generation wireless communications systems.

PCI-Express connectivity kit (PCIe – Desktop)
The PCI-Express connectivity kit provides high-speed connectivity between a desktop PC (with an available PCI-Express x4 slot) to the USRP ™ X300/X310.

And many others... Contact us to know more about our Services.

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