



# GROUND CONTROL SYSTEMS

CP Technologies' expeditionary workstations and portable ground control tablet computing systems provide a platform for versatile, high speed processing capabilities in a mobile military-grade system. Offered in assembled handheld tablet, transit case, and portable "briefcase" form factors, these ground control and computing systems are the ideal solution for a mobile and versatile ground station application while out in harsh, real-world environments. The workstations and systems built by CP Technologies can be customized to meet the specific needs of the operators with optional additions such as capacitive touchscreens, specialized input ports, switches, routers, data links, or other integrated 3rd-party equipment for a fully mobile all-in-one solution.

## Who We Are

CP Technologies designs, fabricates and integrates standard and customized high-performance computing platforms and LCD monitors for military, industry, and commercial applications.

Using COTS components, CP Technologies provides solutions for customers who need reliable systems that will operate in a variety of harsh conditions and who require revision control and hardware consistency for multi-year programs.

CP Technologies is an ITAR Registered and ISO 9001:2015 Certified business that has been operating in Southern California for over twenty years.

**Assembled in the USA**  
**ISO 9001:2015 Certified**  
**ITAR Registered**

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# MTCS

## RUGGED GROUND CONTROL STATION

These systems offer a high-performance desktop or server-class computing systems complete with displays and input peripherals for deployment in the field.

They are designed to provide deployable networks, Rugged Cross Domain Solutions, and a full network architecture to deployed units. Thanks to the standard rackmount interior configuration of our transit case solutions, CP Technologies can offer all manner of rack-mount computing, networking, power, display, and input options to meet the needs of our customers. The processing capabilities available not only support the ground station operations themselves but can also provide the support of an entire Tactical Operation Center. High-quality military-grade components are used throughout to maintain the highest MTBF's. The rugged workstations are intuitive to use, straightforward to install, and are designed to meet MIL-STD's to survive in the toughest deployable environments. These systems can be configured to include integrated third-party equipment such as timing, Power is tailorable based on customer requirements for 110-240 AC or MIL-STD-175 and MIL-STD-704, which includes 28V DC vehicle power.



# MTP

## PORTABLE CONTROL STATION

CP Technologies provides Portable Computing Systems and solutions. Our systems come in both Standard industrial grade solutions as well as Rugged military grade systems. Portable systems enable a complete high-performance desktop or server class computing systems complete with displays and input peripherals for deployment in the field. Systems built by CP Technologies can be custom designed to meet the specific needs of the customer with optional additions such as capacitive touchscreens, specialized input ports, etc. Systems can be scaled up or down in size to match the demands of the application, with sizes ranging from compact desktop sized systems with a single 17" display up to a large scale 4U-equivalent system with triple 24" Hi-Bright displays.

CP Technologies' Portable systems are designed and built to meet the most demanding of portable computing applications.



## GCS2

HANDHELD  
CONTROL  
SYSTEM

CP Technologies' GCS2 series ground control systems provide a platform for versatile, high-speed processing capabilities in a rugged handheld tablet system. Offered with minimized (GCS2-M) and advanced control layouts (GCS2-G), these high-performance tablet systems are the ideal solution for a mobile and versatile ground station application while out in harsh, real-world environments. The combination of the ultra portable form factor and incredible processing power allow the GCS2 to have an excellent balance of SWaP (Size, Weight and Power). The systems can be customized to meet the specific needs of the operators with optional inputs including CANBUS, USB, RS-232, GPS and more for a capable all-in-one mobile solution. High-quality military-grade components are used throughout to maintain the highest MTBF's. Our rugged GCS systems are built to be intuitive to use while meeting MIL-STD's to survive in the toughest deployable environments.



## KEY SPECIFICATIONS

	GCS2	MTP	MTCS
<b>CPU</b>	Intel i5	Up to Dual Intel Xeon	<p>MTCS Systems are fully customizable rackmount computing units and can be designed with any components needed to meet the needs of the user.</p> <p>Each transportable unit can have up to 8U of equipment and each unit is stackable for even larger and more complex system deployments.</p> <p>Component options include:            Server computers            Slide-out/Folding multi-displays            Input devices            Power distribution and backup            Storage arrays            Data Link Devices            Networking switches</p> <p>Contact our team to configure a MTCS system to best fit your needs.</p>
<b>MEMORY</b>	8GB LPDDR3	Varies by configuration ECC and non-ECC options available	
<b>DISPLAY</b>	Up to 10.1" touchscreen	Up to 3x 24" displays Touchscreen optional	
<b>STORAGE</b>	Up to 1TB SSD	Varies by configuration M.2, 2.5" and 3.5" options available	
<b>I/O</b>	Touchscreen Joysticks Control buttons Gigabit Ethernet USB 2.0 Data Link Additional options available	Full-sized Keyboard in IP67 compliant casing, trackball or trackpad available. Optical drive USB 3.0 Gigabit Ethernet Data Link Additional options available	





# SCALABILITY

CP Technologies provides a large array of Ground Control Systems to cover a spectrum of deployment sizes and computing requirements. These range from the ultra-portable GCS2 handheld systems to the stackable MTCS modular rackmount units. The GCS2 allows for a full-fledged portable system with built-in controls for unmanned vehicles and aircraft. Moving up to the MTP system allows for the equivalent of a standard desktop computing system complete with displays and input devices, all self-contained in a transportable and rugged form factor. Finally, the MTCS modular rackmount systems feature a highly customizable platform built in a rugged, transportable enclosure that allows for systems with all the computing power, networking capability, and more that one would expect from a more traditional rack-mount computing system.

CP Technologies has the portable, rugged solution for every ground control system need, regardless of the power or size requirements.



## ENGINEERED TO YOUR SPECIFICATIONS

- In-house engineering department
- Design and build of rapid prototypes. Experience with solving difficult customer application problems through knowledge of the industry and custom system design and manufacturing capability
- Our Engineers use Solid Works 3D CAD modeling software for mechanical design and thermal simulation
- Design experience with MIL-STD-167, MIL-STD-461, MIL-STD-810, and MIL-S-901, in addition to FCC, UL, CE, and country specific agency requirements

## REVISION CONTROL & CONFIGURATION MANAGEMENT

- Our Program Managers will assure your products are revision controlled for the life of the program
- Configuration Management to assure TAA Compliance and system compatibility
- One part number for life of the program
- Counterfeit and obsolescence management

## FACILITY AND TEST

- All integration work is performed in a state-of-the-art, ESD-controlled facility
- Our facility has 50,000 sqft and has dedicated 38,000 sqft indoors to manufacturing with an additional 35,000 sqft of outdoor space for vehicle and shelter integrations
- Operate to anti-static standard ANSI/ESD S20.20-2007 and electronics assembly standard IPC-A-610, Revision E-2010

## QUALITY COUNTS

- ISO 9001:2015 Certified
- 100% system inspection before shipment
- All integrated systems undergo a minimum 24-hour system test and burn-in before shipment to the customer
- Assistance with 3rd party verification of system specifications
- 5-year warranty on all servers and 3-year warranty on LCD monitor products
- TAA compliant
- Built in the USA

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