



BLACK DIAMOND
ADVANCED TECHNOLOGY

PRODUCT CATALOG



RAMPART
WE EQUIP YOUR MISSION

**CANADA'S LEADING SUPPLIER
OF OPERATIONAL EQUIPMENT**

WE EQUIP YOUR MISSION

Rampart is Canada's leading single source provider of **operational equipment**. We offer access to the largest selection of products and brands, world-class subject matter experts, and industry-leading customer service.



EQUIPMENT SOLUTIONS

Our experts are committed to serving the end-user with the world's best products.

If you're unsure of what you need, our experts work with you to find the right solution.



CUSTOMER SERVICE

Our top priority is to provide the highest level of customer service.

Our team is dedicated to providing on time, on budget, on target solutions.



SUBJECT MATTER EXPERTISE

We have subject matter experts who can help and assist every step of the way.

From initial request, to post-contract delivery, warranty, repair and anything else that might come up.

WHO WE SERVE

- ✓ **Military** *All branches*
- ✓ **Police** *Federal, provincial and municipal*
- ✓ **Corrections**
- ✓ **Wildlife & Conservation**
- ✓ **Armed Government Services**
- ✓ **Public Safety & Security**
- ✓ **Wildland Fire**



PERFECTION

Rampart is proud to be the exclusive provider of GLOCK firearms to Military and Law Enforcement in Canada.

WE CAN MEET EVEN THE MOST CHALLENGING MISSION REQUIREMENTS.

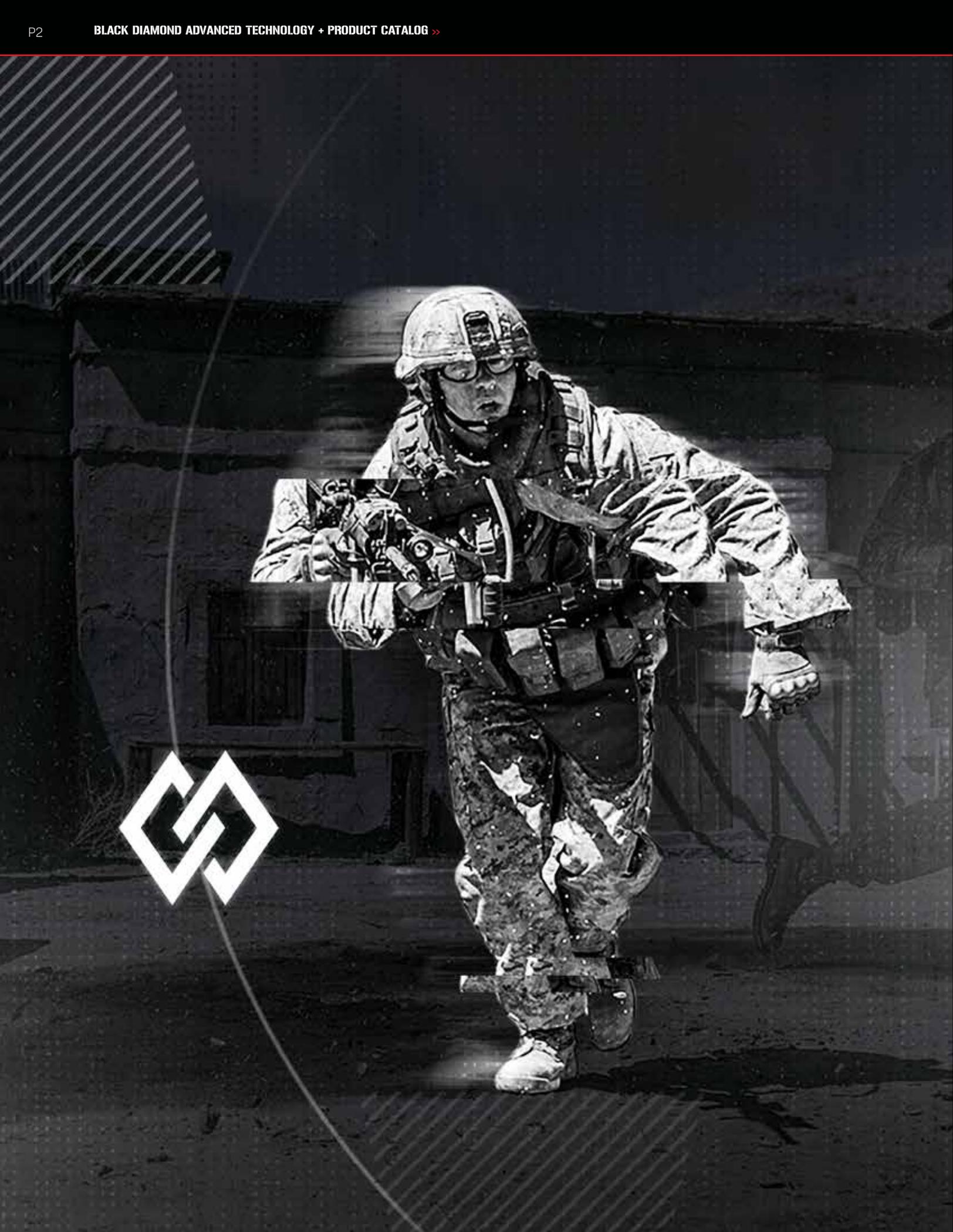
BRING US YOURS.

CONTACT US TODAY

Speak to a specialist now: **1-855-729-0446**

Email us: support@rampartcorp.com

Online: www.rampartcorp.com



CONTENTS >>

INTRODUCTION	4
OUR CUSTOMERS	7
OVERVIEW	9
APEX PREDATOR SYSTEM [APS] NEW	
COMPONENTS	11
AGILE PORT EXPANDER [APEX] NEW	13
RADIO POWER WEDGE NEW	14
END USER DEVICE [EUD]	15
MODULAR TACTICAL SYSTEM [MTS]	
COMPONENTS	17
UNIVERSAL TACTICAL DISPLAY [UTD]	19
TACTICAL MISSION CONTROLLER [TMC] DUAL CORE NEW	21
TACTICAL I/O EXPANSION HUB	22
GPS MODULE	23
MICRO SSD REMOVABLE ASSEMBLY	23
SOFTWARE	
FAC-UTILITY [FORWARD AIR CONTROL UTILITY] NEW	24
FAC-ME [FORWARD AIR CONTROL MESSAGE EMULATOR] NEW	27
CORE APPLICATIONS	28
ADDITIONAL UTILITIES	31
TACTICAL NYLON	
PLATE CARRIER INTEGRATION	32
PICO - MV/XFRAME - MTS [TYR TACTICAL]	35
EAGLE AERO - MTS	36
RBAV - MTS	37
CARRY BAG	38
ASSAULT PACK 800	39
ASSAULT PACK 1200 NEW	40
UNIVERSAL CUMMERBUND KIT	41
CARRIER SOLUTIONS	42
POUCHES & ACCESSORIES	43
CABLES	
APEX	
RADIO CABLES	48
POWER CABLES	48
MISCELLANEOUS CABLES	49
MTS	
CORE MTS CABLES	50
RADIO CABLES	50
POWER CABLES	51
VDL CABLES	52
AUDIO CABLES	52
MISCELLANEOUS CABLES	52
CONTACT US	54

YOU DON'T CHOOSE YOUR MISSION BUT YOU CAN CHOOSE YOUR GEAR

Black Diamond Advanced Technology, LLC. headquartered in Chandler, AZ, is a demonstrated and recognized leader in tactical computing and communications systems focusing on the dismounted Operator. Black Diamond has led many successful integration efforts of the Modular Tactical System as a TRL-9 product and has a track record of high user adoption rates across a broad range of mission requirements. The MTS is fielded in every U.S. service branch and with NATO and U.S. allies for a variety of applications.

Black Diamond Advanced Technology has a long history of providing the dismounted Operator with technology to ensure mission success in the rugged conditions and extreme environments in which they must operate. Our products enable and enhance real and virtual lifelines by integrating with existing fielded equipment to maximize the performance and capabilities of the organic tools the Operator has today.

As our ground forces face new threats and new enemies while simultaneously countering technology that grows more sophisticated by the day, they need a tool to help them fight any threat. Our Forward Air Control-Utility Suite™ for DCAS enables the Operator to function using digital communications and therefore, being more stealthy from a radio emissions perspective than relying on voice communications which mitigates an enemy's direction finding and counter-fire capabilities.

Additionally, with defense spending cuts across the board, Black Diamond Advanced Technology can ensure the services money is well-spent. Black Diamond Advanced Technology products continue to excel in applications such as fires, communications, Tactical Electronic Warfare (TAC-EW), Explosives Ordinance Disposal (EOD), Unmanned Aerial Systems (UAS), and Signals Intelligence (SIGINT) applications. Using one solution to support a variety of mission sets allows for the consolidation of funding for training and support.

Interoperability of equipment and even changing its role from Insertion to extraction is paramount. Technological advancements are born from the tactics used by our enemies abroad. Black Diamond continually fields solutions that enable us to stay ahead and address both high and low tech threats. Former Defense Secretary Panetta commented in a speech, "...As we lose battle space infrastructure resources, SOF must utilize organic capabilities to identify, track and prosecute threats". Black Diamond's solutions work to keep the advantage on our side. Rear Admiral Pybus as the Commander, Naval Special Warfare (NSW) Command stated in a speech, "...for a small element that is more alone out there, it's got to be able to reach back, to communicate, to bring other capabilities to bear [and] to move, so we are taking harder looks on how we do that for our forces." This is the cornerstone of the relationship BDAT has with our customers.



OUR CUSTOMERS >> OUR FOCUS



OUR CUSTOMER OUR FOCUS

We are dedicated to building only the best products and pride ourselves in providing the utmost protection to brave men and women. We believe innovation comes from the lab as well as the field. Take it from our customers in the field who know first-hand what it takes to get the job done.

"The most succinct fires kit on the market. Highly recommended!"

-US SOF Operator

"MTS is unlike any other system that I have used - when using the system in the field it responds so quickly when I need it the most."

-US SOF Operator

"Relying on my equipment is what brings me confidence. Relying on the Modular Tactical System, has allowed me to feel secure in combat."

-USMC Sniper

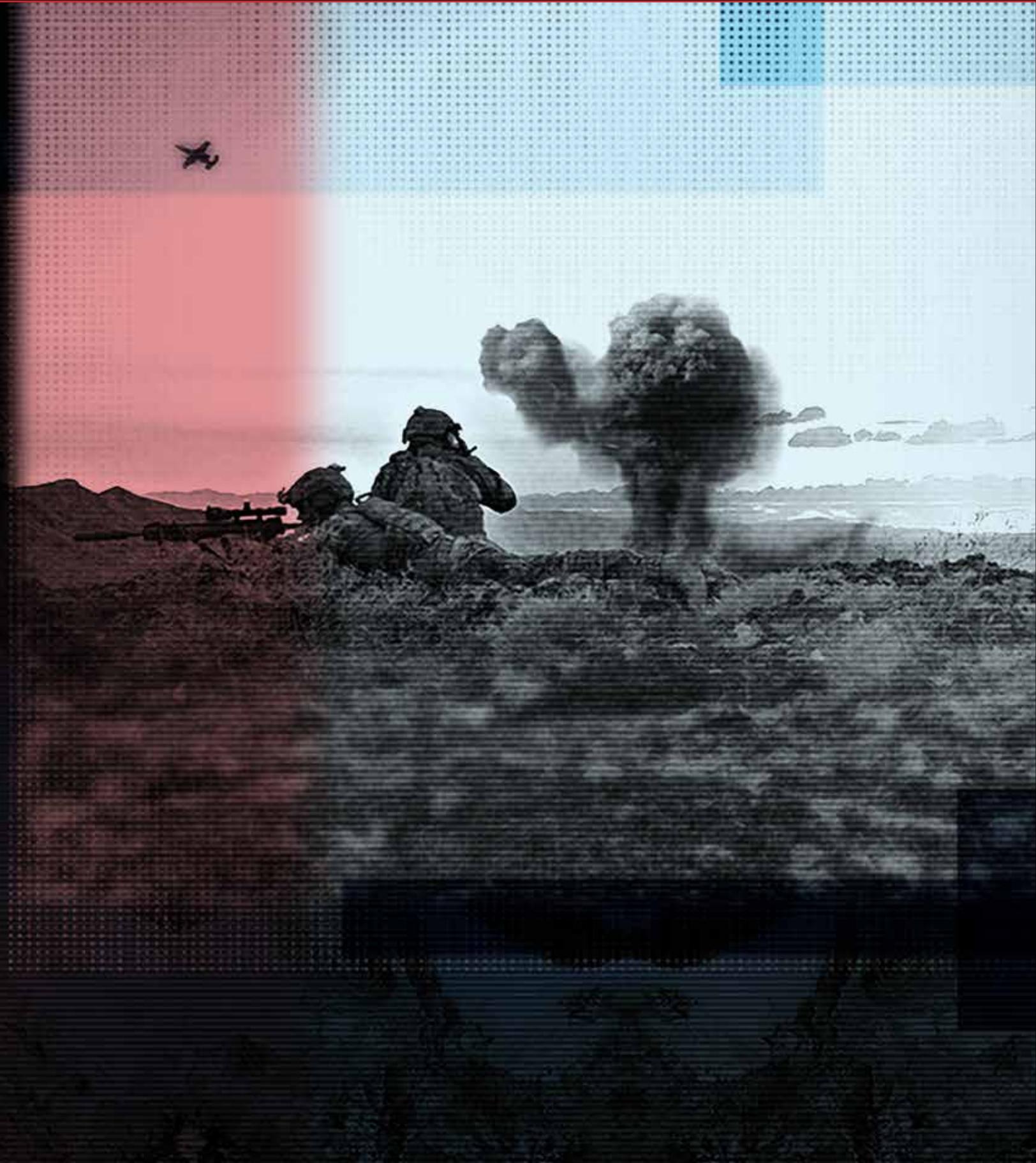
"The Black Diamond Tactical Controller is completely integrated into the vest. It's there when I need it, and out of the way when I don't."

-JTAC

"First kit I would call a complete game changer."

-US SOF Operator

YOUR MISSION YOUR GEAR >>OVERVIEW



YOUR MISSION YOUR GEAR

The APEX Predator System (APS) and MTS allow a warfighter to transition from computer operation to direct tactical engagement in seconds with a wearable system that is incorporated into a compact plate carrier system, without compromising any of the certified ballistics protection. A warfighter doesn't need to stop, put down gear and lose time in a stationary position while powering up or repacking equipment. Black Diamond's goal was to approach the wearable computer solution as a complete system, providing true "on the move" performance and situational awareness for a variety of applications, including targeting (JTACs, TACPs and Forward Observers), Combat Medics, Explosive Ordnance Disposal, Combat Weather and Military Intelligence.

- >> Transition in seconds from system operation to direct combat
- >> Operate on the move
- >> Control fielded equipment including video downlink receivers and two radios from a single display
- >> 6.5-inch Multi-touch display can be operated with gloves
- >> Run all gear from one battery with built in power manager
- >> Uses a sunlight-viewable and NVG-compatible display, or integrate with helmet-mounted display (HMD) devices
- >> IP67- Operate in blowing dust and up to a meter of water
- >> Access to ammo and other mission critical equipment

OPTIMIZED FOR DISMOUNTED OPERATIONS

Reduced size, weight, and power (SWAP) // MOLLE compatible; works with any plate carrier or tactical pack // Full integration with tactical plate carrier and uniform ensemble // Cables route internal to vest, reduces exposed cables and snag hazards // One-handed display operation // Optional assault pack and battle belt variants

MULTI-MISSION FLEXIBILITY

Targeting/ Precision Strike // Digital Close Air Support // Explosive Ordnance Disposal // Unmanned Ground vehicular controller // Unmanned Air vehicular controller // Navigation, Command and control (C2) // Communications // Pararescue // SIGINT (DF) // Sensitive Site Exploitation

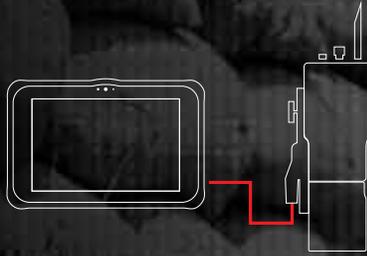
INTEROPERABLE WITH FIELDIED EQUIPMENT

Radios, batteries, and power systems // CAS, C2/SA, and common mapping applications // Helmet-mounted displays // Peripherals (e.g. laser range finders and push-to-talk systems) // Video downlink receivers

NOW AVAILABLE MOTS/COTS

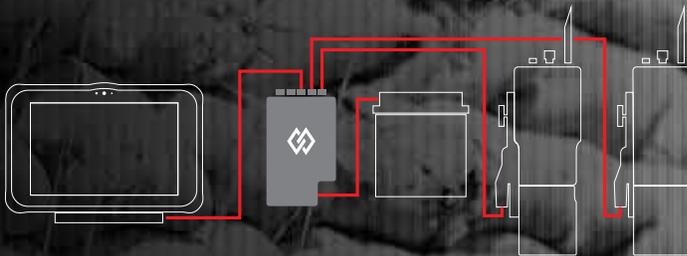
Tactical Readiness level 9 // Deployed with numerous US and NATO special operations units throughout OEF and other areas of operation // Combat tested and Proven

TIER 1 >>>

**DISTRIBUTED COMMUNICATIONS >>**

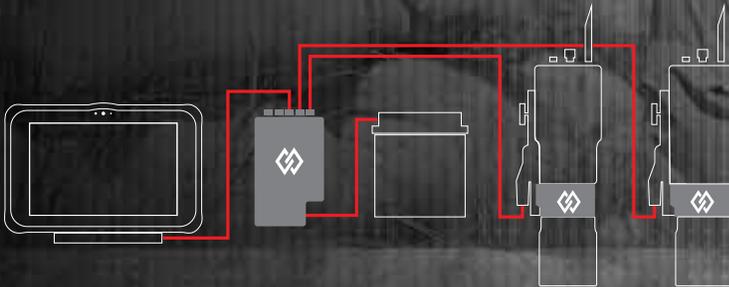
Easily and quickly connect end-user devices of choice directly to your radio with Black Diamond USB peripheral cables.

TIER 2 >>>

**APEX + MULTIPLE PERIPHERALS >>**

Incorporating the APEX Predator System you can now connect 4 radio/peripheral devices and manage them from a single end-user device (computer, tablet, smartphone). You can also daisy chain additional APEX Systems or Tactical I/O Expansion Hubs.

TIER 3 >>>

**POWER MANAGEMENT >>**

Employing Black Diamonds power management system allows you to power and charge your tactical solution from a single battery system, ensuring you're operational when you need to be. Jump in a vehicle and recharge your whole kit or even scavenge power from other batteries.

APEX PREDATOR SYSTEM >>>

You can't choose your mission, but you can choose your gear. Modeled after Black Diamond's Modular Tactical System, the APEX Predator system enables communications from tactical data radios and peripherals to commercial tablets and computers. Command and control from a single solution means enhanced situational awareness.

APEX PREDATOR SYSTEM >> COMPONENTS



AGILE PORT EXPANDER [APEX]

P/N **MA-0080-00**

The Agile Port Expander (APEX) is the heart of the APS solution and provides power & data distribution from the attached End User Device (EUD) computer to multiple peripherals. Features four universal peripheral ports for plug & play cables to a variety of communication peripherals and sensors. Customize your APS kit for your unique mission.



RADIO POWER WEDGE

P/N **MA-0068-00**

The Radio Power Wedge enables power management to PRC 152/148 radios. It operates in trickle charge (radio battery) and battery eliminator modes.



MODULAR GPS

P/N **MA-0086-00 [Module Only]**

The NEW shoulder-mounted, low profile Modular GPS, designed for the APEX Predator System, features the same outstanding performance as the MTS GPS and includes a new cable interface.

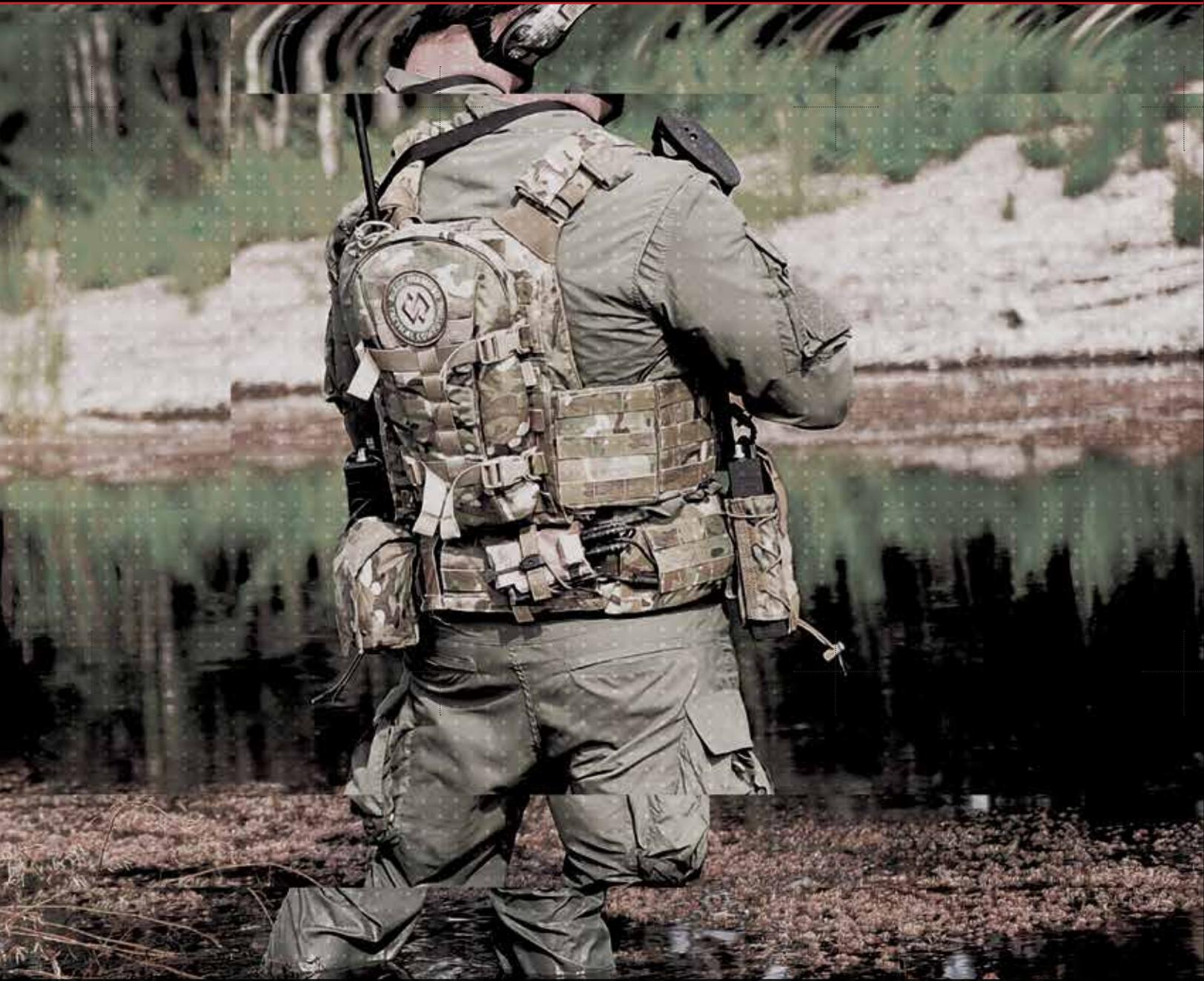


END USER DEVICES [EUD]

P/N **MA-0081-01***

Computing and user interface are at the core of the APEX Predator System (APS). The EUD can be your COTS computer of choice.

***Standard APS kit is configured with 7" multitouch LCD which hosts an Intel® Core™ i5 processor packed with ram & storage for every possible mission requirement. Works with gloved hands in bright sunlight conditions.**

AGILE PORT EXPANDER >> APEx

AGILE PORT EXPANDER >>

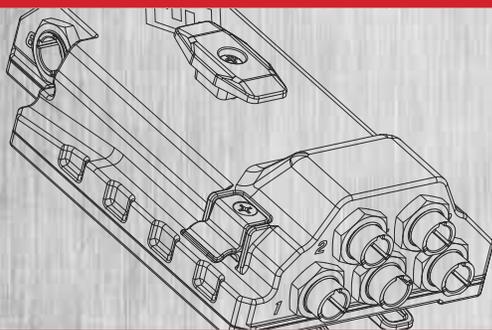
The system is designed for multiple mission sets that demand a flexible solution. It allows for the data and power connection of multiple peripheral devices, which may have a variety of interfaces, back to a COTS computing system over a single USB Interface. Now your computer system can be a full desktop computer, laptop computer, a Smart Phone, or a tablet computer. The APS system is designed to work with the end-user's choice of device.



>> The Agile Port Expander (APEX) expands the connection options on any computer enabling the communications of tactical radios and other peripherals. APEX also acts as a power distribution device by powering the attached peripherals from the system power input port.

AGILE PORT EXPANDER >>APEX

PART NUMBER **MA-0080-00**



PHYSICAL

SIZE >> 4.9" (L) x 2.9" (W) x 1.4" (Depth excluding connector bump 0.9")

WEIGHT >> 10oz

SYSTEM POWER

>> 12-35 VDC

INPUT >> AC Adapter Cable

>> Vehicle Adapter Cable

BATTERY CABLE OPTIONS >> LI-80/LI-145 // Palladium Conformal WB // BA-5590 // BB-2590 Charger

APEX INTERFACES

- >> 4 Universal Peripheral Ports // USB 2.0/3.0 & Power
- >> 1 End User Device
- >> 1 System Power Input Port

ENVIRONMENT

- OPERATING TEMP >> -22 to 131°F [-30 to +55°C]
- STORAGE TEMP >> -40 to 167°F [-40 to +75°C]
- DROP >> 48-Inch, MIL-STD-810G Table 516.6-VI
- SEALING >> IP-67
- MIL-STD-810G >> Low Temperature - High Temperature, Immersion, Altitude, Drop Shock, Vibration, Dust, Sand
- MIL-STD-461F >> RE102, CE102, CS101, CS114, CS115, CS116, RS103

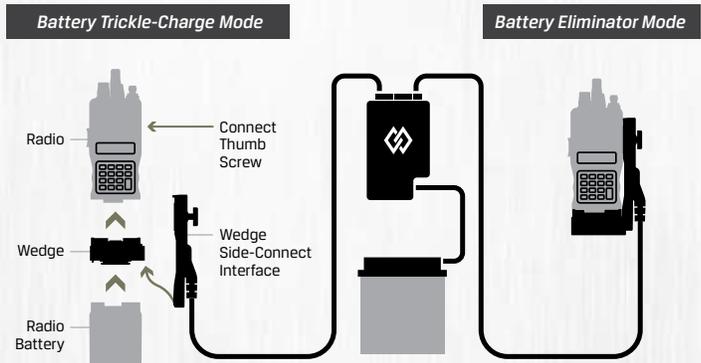
PORTS

- >> **1-4** USB 2.0/3.0 Data & Power Port
- >> **5** EUD Port
- >> **6** Power Port



>> When connected to the APEX or MTS the Radio Power Wedge can act as a battery eliminator for your radio, when connected to a battery, it will trickle charge your battery as well, thus allowing you to power all radio devices from a single common battery. This aids the operator in decreasing weight by carrying fewer batteries and battery types.

The **Radio Power Wedge** connects to the PRC-148 and PRC-152 radios. When connected to the APEX or MTS the Radio Power Wedge can deliver power to the radio and battery.



RADIO POWER WEDGE >>

PART NUMBER **MA-0068-00**

SPECS

PHYSICAL	>> 2.90" (L) X 1.60" (W) X 1.4" (D) >> Less than 3 oz
POWER	>> Wedge System Power input (9-35VDC)
ENVIRONMENT	>> Operating temp: -22 to +140 °F [-30 to +60 °C] >> Storage temp: -40 to +167 °F [-40 to +75 °C] >> Sealing: IEC60529 IP67

HUMAN MACHINE INTERFACE



The radio with attached wedge can be stowed either in a custom MOLLE pouch (MM-0116) or in the BDAT Universal Cummerbund.

FEATURES

- 1 Allows one-handed connection
- 2 Compatible with future MTS radio cables
- 3 Capable of powering radio from common MTS system battery and trickle charging the radio battery at the same time.
- 4 Capable of powering radio without battery, i.e. Battery Eliminator configuration*

* In the battery elimination mode recommended dual-headed 5590 battery cable CB-0242-00 to avoid radio reboot during MTS battery hot swap.



MODULAR GPS >>



- >> High-sensitivity commercial-grade GPS Receiver module works with both MTS and APEX Predator Systems.
- >> Cable positions receiver on the shoulder for optimal view of GPS satellites while standing or prone and reduces interference with the rest of kit.
- >> Low profile design reduces bulk and weight.
- >> Modular design provides low cost upgrade path to SAASM GPS Receiver from Rockwell Collins (use the same cable).
- >> Low power and fast acquisition time means you always know your position.
- >> Fully sealed and excellent environmental performance.

MODULAR GPS >>

P/N

GPS MODULE	>> MA-0086-00
APEX CABLE	>> CB-0385-00
MTS CABLE	>> CB-0388-00

PHYSICAL

PUCK SIZE	>> 2.5" (L) x 1.8" (W) x 0.7" (H)
PUCK WEIGHT	>> 2.0 oz
CABLE LENGTH (MTS)	>> 11 Inches
CABLE LENGTH (APEX)	>> 48 Inches

DATA INTERFACE

>> 1 Hz NMEA serial data stream

ENVIRONMENT

OPERATING TEMP	>> -22 to 140°F [-30 to +60°C]
STORAGE TEMP	>> -40 to 167°F [-40 to +75°C]
SEALING	>> IEC60529 IP-67
MIL-STD-810G	>> Low Temperature - Cold Boot, Low Temperature - Storage, High Temperature, Immersion, Altitude, Drop Shock, Vibration, Dust, Sand
MIL-STD-461F	>> RE102, CE102, CS101, CS114, CS115, CS116, RS103

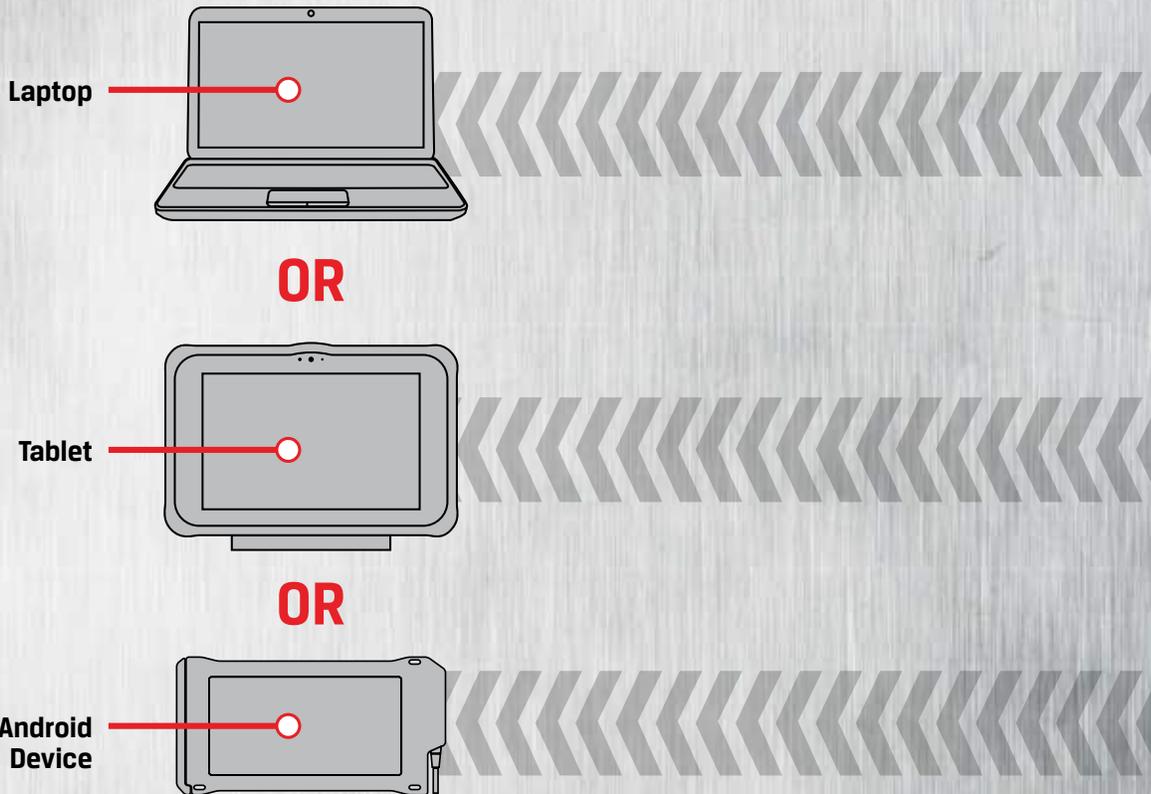


END USER DEVICE >> EUD



>> The APeX Predator System enables communications from tactical data radios and peripherals to commercial tablets and computers. It allows for the data and power connection of multiple peripheral devices, which may have a variety of interfaces, back to a COTS computing system over a single USB Interface. Now your computer system can be a full desktop computer, laptop computer, a Smart Phone, or a tablet computer.

***Standard APS kit is configured with 7" multitouch LCD which hosts an Intel® Core™ i5 processor packed with ram & storage for every possible mission requirement. Works with gloved hands in bright sunlight conditions. (Pictured)**





**COMPATIBLE
WITH **ANY**
WINDOWS
OR ANDROID
DEVICE.**

TMC

Mounts within an unused zone on the tactical plate carrier, maintains performance with assault pack worn over top

I/O HUB

Stowed inside cummerbund, easily accessible for intermittent or continual use

GPS

Clear view of the sky

UTD

Sunlight viewable / NVG viewable

MODULAR TACTICAL SYSTEM >>

The MTS combines communications, equipment, and power management into a wearable C4ISR, SA, BFT and precision-targeting tool that delivers true foot-mobile computing. With a design that anticipates how an operator moves, strategizes and acts, the MTS funnels control of mission-critical peripherals to a central display to eliminate battery and equipment redundancies and lighten load-out.

MODULAR TACTICAL SYSTEM >> COMPONENTS**UNIVERSAL TACTICAL DISPLAY**P/N **MA-0032-04**

The UTD is a 6.5-inch Multi-touch display used as the primary user interface with the MTS. The hand-held display is sunlight-viewable, NVG-compatible, has five user programmable buttons, and the multi-touch screen can be operated with gloves. It interfaces with the system via a gold-dot connection on the back of the display enclosure.

**TACTICAL MISSION CONTROLLER**P/N **MA-0077 Dual-Core**

The Tactical Mission Controller (TMC) Dual-Core provides radio control and radio data protocol translation, computing power, data storage, security, and power distribution, as well as interfaces to core MTS elements.

**TACTICAL I/O EXPANSION HUB**P/N **MA-0045-00**

The Tactical I/O Expansion Hub provides optional ports for audio, data and power. A power port is integrated as part of the TMC cable connection. All ports are fully sealed (IP67). Tethered dust covers are included. The I/O Hub is designed to be stowed inside the cummerbund or in a custom pouch.

**GPS & CABLES**P/N **MA-0031-02**

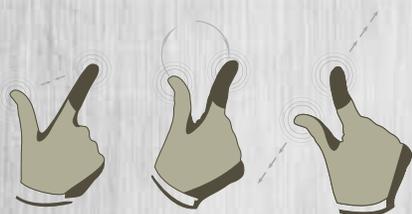
The MTS GPS Module connects to the TMC for data and power. It is captured in a pouch that attaches to the tactical vest shoulder strap. The TMC GPS port also supports connection to a SAASM instead of the MTS GPS Module.

MODULAR TACTICAL SYSTEM >> UTD



UNIVERSAL TACTICAL DISPLAY >>

The UTD is a 6.5-inch touchscreen display used as the primary user interface with the MTS. The hand-held display is sunlight-viewable, NVG-compatible, features five user programmable buttons, and the multi-touch screen can be operated with gloves. It interfaces with the system via a gold-dot connection on the back of the display enclosure.



>> The UTD provides unmatched visibility even in the brightest sunlight and is NVG compatible. In NVG mode, the display maintains light discipline and does not compromise the user's position by illuminating the user when viewed with either the naked eye or night vision goggles. The user can also operate and view the system while wearing NVGs. The UTD also offers five programmable buttons that allow quick access to common commands and applications.

UNIVERSAL TACTICAL DISPLAY >>UTD

PART NUMBER **MA-0032-04**



SPECS

PHYSICAL	>> 8.4" (L) X 6.4" (W) X 1.4" (D)
	>> 1.5 LBS
DISPLAY	>> 6.5-inch sunlight-viewable touchscreen
	>> XGA (1024 x 768)
	>> Touchscreen gestures/glove compatible
INTERFACES	>> Multi-touch with functional stylus
	>> MIL-STD-3009 NVIS radiance compliant
	>> 5 user programmable buttons
	>> Dedicated on-screen keyboard button
INPUT/OUTPUT	>> Optical joystick with left & right click mouse buttons
	>> Low-profile cable
	>> VGA, USB via gold-dot connector

POWER	>> 8-35 VDC input
	>> MIL-STD-1275 compliant
	>> Operating temperature: -22 to +140 °F [-30 to +60 °C]
ENVIRONMENT	>> Storage temperature: -40 to +167 °F [-40 to +75 °C]
	>> Sealing: IEC60529 IP67
	>> MIL-STD-810G
	>> MIL-STD-461F
	>> 7H display surface hardness

HUMAN MACHINE INTERFACE

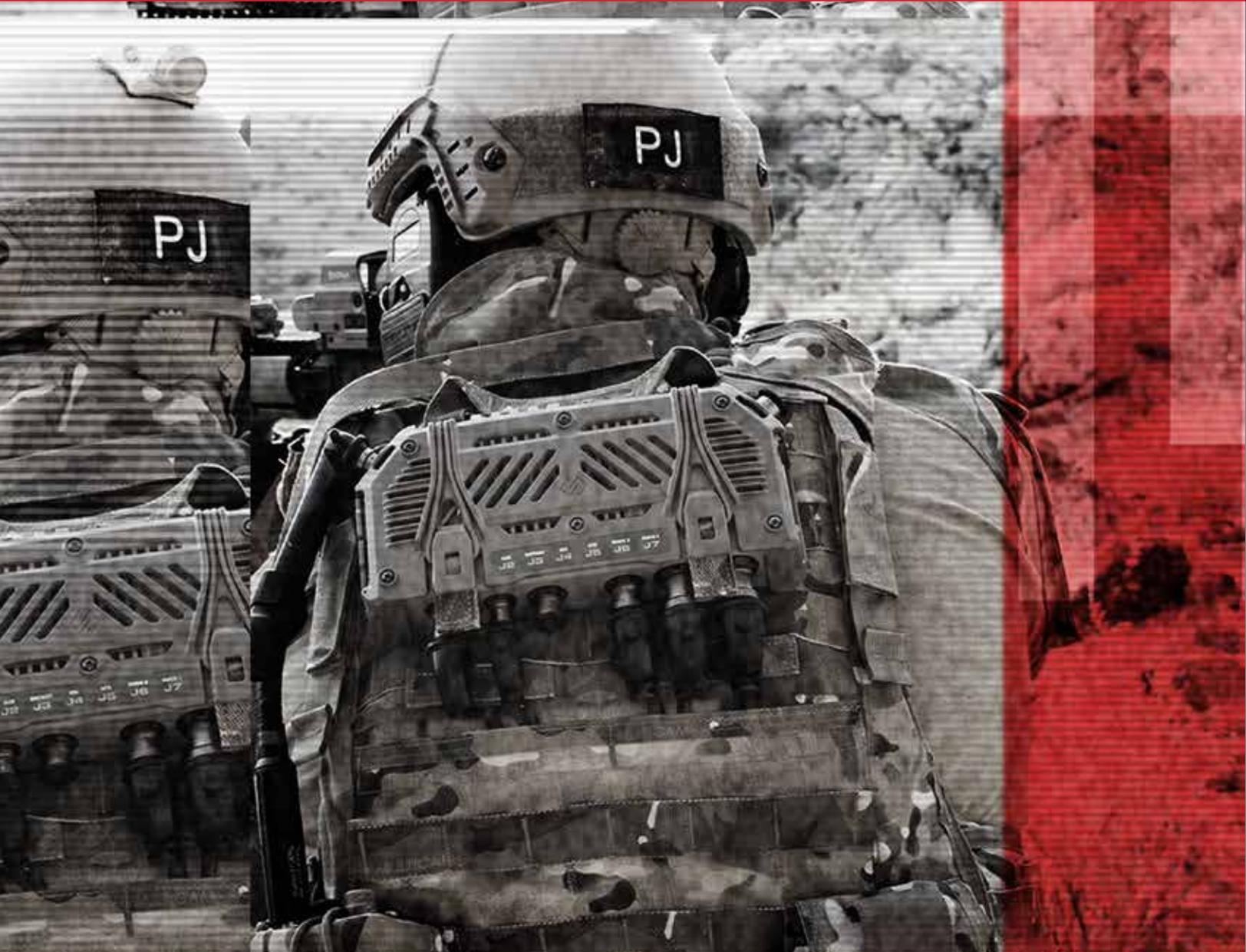


The UTD is intended to mount to the front upper panel (using MOLLE) on the plate carrier or vest. This offers optimal display viewing and accessibility. The UTD can be stowed using either the UTD holder (low profile) or the UTD pouch. Both options allow the display viewing angle to be adjusted.

FEATURES

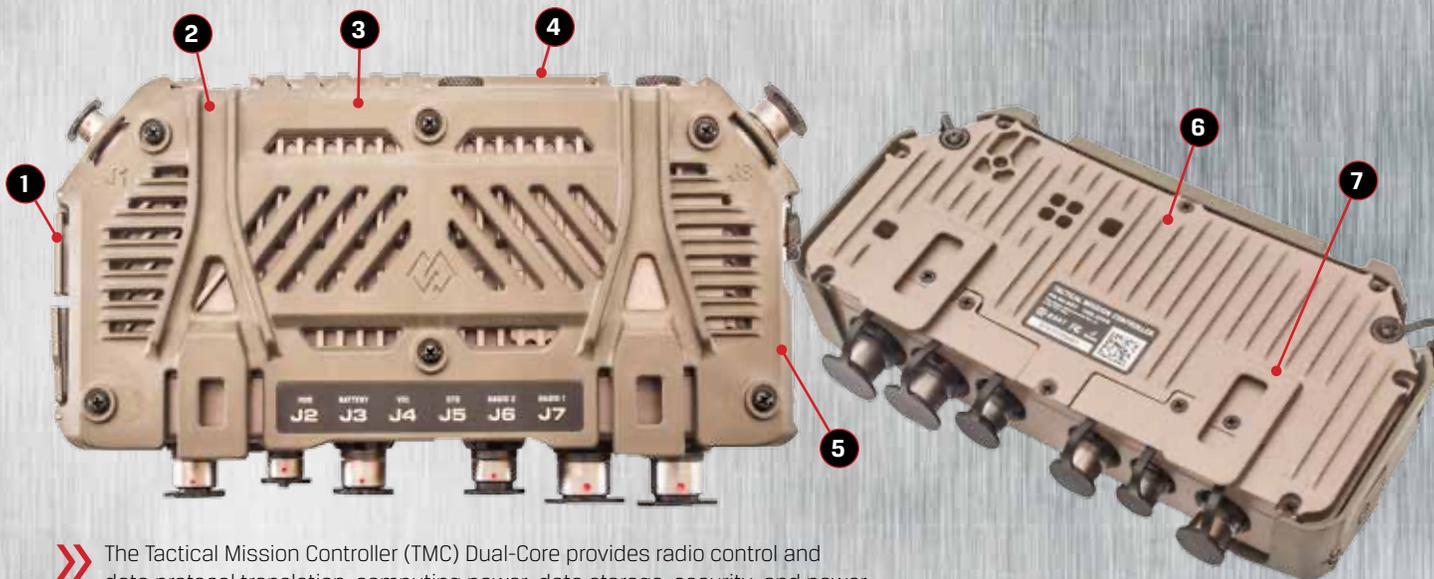
- 1 L & R click mouse buttons
- 2 User programmable buttons (P1-P5)
- 3 Optical joystick
- 4 VKB button (activates virtual keyboard)
- 5 Grip surface
- 6 Gold-dot connection
- 7 Stylus with tether

MODULAR TACTICAL SYSTEM >> TMC



TACTICAL MISSION CONTROLLER >>

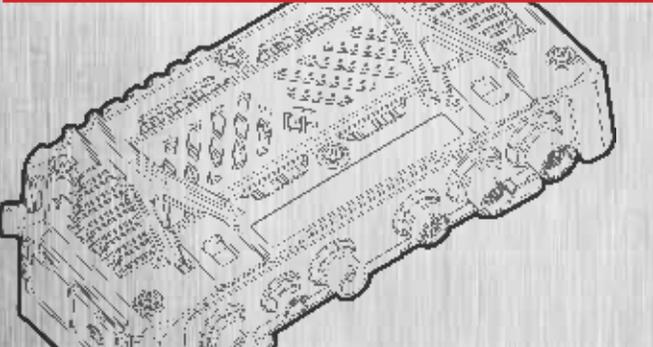
The MTS Tactical Mission Controller (TMC) is the heart of the MTS kit and houses a computer, power management system, tactical radio modem and embedded radio interface electronics. The TMC Dual-Core provides a more than two times faster processor and more than four times faster 3D graphics engine than the previous generation single-core TMC—all for the same size and weight while maintaining backward compatibility with fielded MTS accessories and cables. The dual-core processor also provides the ability for simultaneous dual-video output and support for new radios, as well as other feature improvements. The MOLLE-compatible TMC is worn on the back of the tactical vest or can be configured in a pack or carry-bag.



>> The Tactical Mission Controller (TMC) Dual-Core provides radio control and data protocol translation, computing power, data storage, security, and power distribution, as well as interfaces to core MTS elements.

TACTICAL MISSION CONTROLLER DUAL-CORE >> TMC

PART NUMBER **MA-0077 DUAL-CORE**



CONFIGS

DUAL-CORE >> **512 GB** **MA-0077-02**

SPECS

PHYSICAL	>> 7" (L) x 3.5" (W) x 1.5" (D) >> 1.6 lbs
CORE SYSTEM	>> Windows® XP, Windows® 7, Linux >> Intel® Atom™ N2800 Dual-Core, 1.86 GHz processor >> 4 GB memory >> Removable Solid State Drive (SSD) 512GB
POWER	>> 9-35 VDC input >> MIL-STD-1275 compliant
BUNDLED UTILITY SOFTWARE	>> LaunchPad application launcher >> Status and Configuration (StatCon) >> AppConfig (open/restore a set of applications) >> Virtual Keyboard (VKB) >> Contact BDAT for a full list of utilities
SECURITY	>> Reduced infrared signature >> Removable SSD >> Tamper detection >> Zeroize button

INPUT/OUTPUT	J1 GPS (commercial or DAGR) J2 I/O Hub J3 Power port: 9-35 VDC J4 Video down link (VDL) (i.e. MVR-IV, L3 SIR, Harris 7800T) J5 Universal Tactical Display port J6 Radio (i.e. AN/PRC: 117G, 117F, 152, 148; RT-1922; WaveRelay) J7 Radio (i.e. AN/PRC: 117G, 117F, 152, 148; RT-1922; WaveRelay) J8 AUX display port (i.e. helmet mounted display)
SLOTS	>> SD card slot (up to 32 GB)
ENVIRONMENT	>> Operating temp: -22 to +140 °F [-30 to +60 °C] >> Storage temp: -40 to +167 °F [-40 to +75 °C] >> Sealing: IEC60529 IP67 >> MIL-STD-810G >> MIL-STD-461F

HUMAN MACHINE INTERFACE



On a wearable configuration, the TMC mounts to the upper-rear vest panel via MOLLE. Tabs on the bottom of the TMC interface with the PALS webbing and elastic T-bar restraints secure it in place. Cables are routed inside the vest using pass-thru openings below the TMC. The TMC may also be configured with a BDAT supplied assault pack or carry bag.

FEATURES

- 1 Power/zeroize access doors
- 2 Channel feature and tab used for mounting TMC to MOLLE
- 3 Polycarbonate thermal cover
- 4 SSD access door
- 5 SD card slot access (not in view)
- 6 Contoured back surface matches ESAPI plate
- 7 Clips interface with PALS

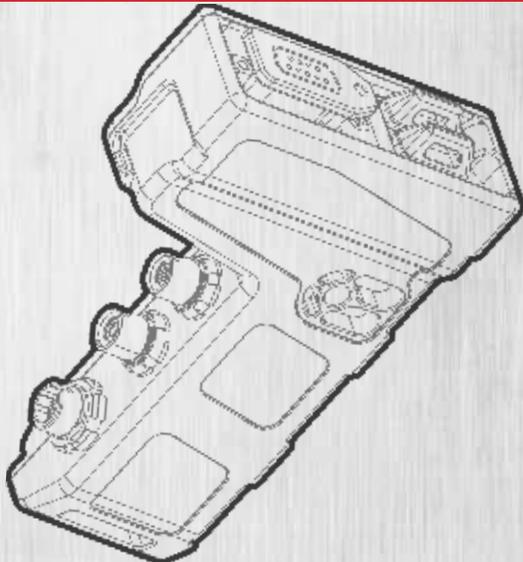
MODULAR TACTICAL SYSTEM >> TACTICAL I/O HUB



>> The Tactical I/O Expansion Hub is a rugged USB Hub and port expander. The Tactical Hub provides I/O (input/output) capability for multiple USB ports, RS232, and audio. All ports are fully sealed (IP67). Tethered dust covers are included. The Tactical Hub is designed to be stowed in the MM-0074-XX Pouch or may be conveniently located in a pocket or tactical plate-carrier cummerbund. The Tactical I/O Expansion Hub can be used with MTS or APS.

TACTICAL I/O EXPANSION HUB >>

PART NUMBER MA-0045-00



SPECS

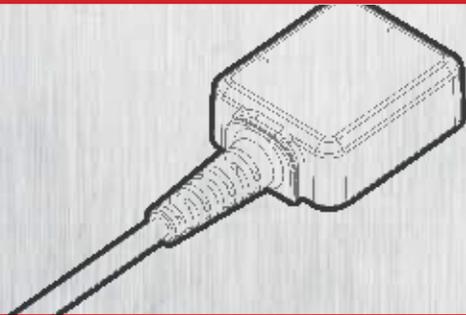
PHYSICAL	>> 4.5" (L) X 2.85" (W) X 1.1" (D)
	>> 5.5 OZ
POWER	>> INPUT: 5V, 3A max
	>> OUTPUTS: 5V, 1A max each
INPUT/OUTPUT	J11 Connect to host computer
	J12 USB via sealed circular connector, high retention force
	J13 Audio in/out via sealed circular connector, high retention force
	A1 2x Type A USB sealed commercial connectors
	A2 RS-232 via sealed DB-9 connector
ENVIRONMENT	>> Operating temp: -22 to +140 °F [-30 to +60 °C]
	>> Storage temp: -40 to +167 °F [-40 to +75 °C]
	>> Sealing: IEC60529 IP67
	>> MIL-STD-810G
	>> MIL-STD-461F

>> The MTS GPS Module connects to the TMC for data and power. It is captured in a pouch that attaches to the tactical vest shoulder strap. The TMC GPS port also supports connection to a DAGR instead of the GPS Module.



MTS GPS MODULE >>

PART NUMBER **MA-0031-02**



PHYSICAL	>> 1.7" (L) X 1.4" (W) X 0.6" (D) >> 1.9 OZ
ENVIRONMENT	>> Operating temp: -22 to +140 °F [-30 to +60 °C] >> Storage temp: -40 to +167 °F [-40 to +75 °C] >> Sealing: IEC60529 IP67 >> MIL-STD-810G >> MIL-STD-461F

SPECS

- COMMS
- >> High sensitivity commercial grade GPS
 - >> SiRFstarIII chipset
 - >> 1 Hz NMEA serial data stream
 - >> Shoulder-mounted for clear view of sky

HUMAN MACHINE INTERFACE



The MTS GPS Module is stowed inside a small pouch attached to a Velcro platform. This platform mounts to the shoulder strap of the plate carrier. This location offers the best angle to the sky and also keeps the module off the shoulder strap so that it does not interfere with packs or other equipment.

>> Spare MicroSSD assembly for the TMC. Commonly used as a separate unclassified drive for MTS



MICRO SSD REMOVABLE ASSEMBLY (SPARE) >>

CONFIGS

MICRO SSD >> **512 GB** P/N: SA-0123-04

SPECS

- FEATURES
- >> Solid-state rugged construction
 - >> High speed SATA interface
 - >> Easily removable and interchangeable
 - >> Integrated heater for low temperature operation

SOFTWARE >> FORWARD AIR CONTROL-UTILITY

FORWARD AIR CONTROL-UTILITY SUITE >>

BASE P/N		SV-FAC-UTS	
FEATURES	>> CAS & DCAS Capabilities	PARTS INCLUDED	>> FAC-Utility Suite™ CD Installer
	>> Built-in features for supporting VMF and SADL		>> Software Quick Reference Guide (1)
	>> Integrates video downlink receivers		>> FAC-Utility Suite™ User's Manual (1)
	>> Aircraft simulation training tool		

FAC-US™ is made up of **FAC-Utility™** and **FAC-Message Emulator™**. FAC-US™ allows the Joint Terminal Attack Controller (JTAC) to decisively deliver fires to the battlefield from virtually any asset available. Whether it's an A-10 lining up for a gun run, an AC-130 in orbit ready to engage enemies in Danger Close range of friendlies, a Howitzer miles away ready to lay rounds down on a surface to air threat, or even a Ticonderoga Class Cruiser off the coast ready to engage hardened targets during an amphibious assault. FAC-US™ facilitates the JTAC in any situation they might find themselves in, from Counter Insurgency Operations in a small village in Afghanistan or future Major Combat Operations (MCO) against near peers in a chaotic battlefield packed with air threats in a denied environment. FAC-Utility™ is designed from the ground up by JTACs for JTACs to assist both conventional and special operations Operators to conduct Close Air Support (CAS) and other mission sets with little or no training on the software. Using the same Graphical User Interface (GUI) principles that make smart phone applications and video games user friendly and intuitive, we were able to study and analyze JTAC behavior to increase the system's effectiveness. This approach ensures that FAC-Utility™ will make Digitally Aided CAS (DACAS) simple enough to be used in combat while allowing JTACs to take advantage of Variable Message Format (VMF) and Situation Awareness Datalink (SADL). FAC-Utility™ integrates a variety of Video Downlink (VDL) devices, LASER Range Finders (LRFs), Designators (LTDs), and Radios to ensure that everything a JTAC needs to be successful is at their fingertips. Bottom line, Black Diamond understands what the JTAC needs and what they encounter. This system is designed so that an exhausted, injured, and task saturated JTAC can operate it with ease, making it an essential tool that gives the JTAC and his team the edge they need to achieve mission success and come home alive. FAC-Utility Suite works on any Windows computer.

FAC-Utility™ 9-Line



TARGETING >>

JTACs do more than control CAS aircraft, JTACs control joint fires to meet the Ground Commander's Intent (GCI). FAC-Utility™ incorporates multiple fires formats. For example a JTAC can take his LRF and develop targets for A-10s that are en route to the fight. Prior to the arrival of the A-10s, AH-64s arrive to support the battle; the JTAC switches from a 9-Line to a Helicopter Call For Fire (CFF) in one click. The JTAC can then engage with the AH-64s and switch back to a CAS 9-Line when the A-10s arrive.

FAC-Utility™ supports several types of US fires formats and their subsets used today:

-  **CAS 9-Line**
-  **Electronic Attack**
-  **Helicopter CFF**
-  **Special Operations Gunship CFF**

FAC-Utility™ incorporates friendly-based safety features to help prevent fratricide. Friendly location must be completed prior to transmission, the JTAC can either select the "My Position" button which will make him the nearest friendly or use the "Select Position" button to click on the map and designate the nearest friendly, which creates a friendly icon if one is not yet made. This allows the JTAC to maintain speed and accuracy without sacrificing safety.

The feature that epitomizes the simplicity and ease of use of FAC-Utility™ is the TIC Button™ (Patent Pending). FAC-Utility™ gives the JTAC the ability

to conduct detailed pre-mission planning, but it is not required. The JTAC is free to use the TIC Button™ to develop a 9-Line. The TIC Button™ allows the JTAC to designate a target on screen or through his LRF/LTD. Once chosen, a 9-Line will appear with only the need to nominate a friendly position, which can be done with a single button press, and the 9-Line is complete. An accurate 9-Line can be developed and transmitted in less than 10 seconds using FAC-Utility™.

DACAS - VMF & SADL >>



FAC-Utility™ makes VMF simple enough for combat. JTACs can send and receive a variety of messages from 9-Lines to friendly points without coordinating VMF settings prior to the mission for both aircraft and other JTACs. This is the first truly Operator friendly VMF solution.

FAC-Utility™ supports the currently fielded versions of VMF, which allows it to effectively communicate with today's VMF platforms. FAC-US™ also supports future platforms - i.e. the F-35 Joint Strike Fighter. It's easy to say FAC-Utility™ makes VMF simple, but it is another thing to prove it. FAC-Utility™ has proven it works time and time again over months of testing with A-10s, AH-1, VMF enabled AV-8Bs, B-52s, Block 30 F-16s, F/A-18s,

>> FAC-Utility™ Video DownLink (VDL)



F-35, and the Tornado. During a weeklong test and evaluation period at Nellis AFB, 12 JTACs conducted DACAS with A-10s with no pre-mission VMF set-up planning. All DACAS Operations were conducted dynamically and FAC-Utility™ performed with a 100% success rate with VMF, passing over 200 CAS 9-Lines successfully.

FAC-Utility™ also integrates SADL and allows the JTAC to seamlessly choose which data link he wants to use. While using SADL, the JTAC can designate a Sensor Point of Interest (SPI), engage in chat, go direct to another SADL user, or even join a SADL Gateway. In order to mitigate configuration complexities and keep things as simple as possible for the user, FAC-Utility™ also automatically locates the radio, its configuration settings, and configures the IP settings of both the Generic Host and the Ethernet interface on the RT-1922 MicroLight Radio as necessary.

FAC-US™ INTEGRATION - VIDEO DOWNLINK, LASERS & RADIOS >>

FAC-Utility™ fully incorporates the Tac-ROVER, MVR-IV, and MVR VI Keypad Display Units (KDUs) and video feeds from overhead assets, from the targeting or map interface. FAC-Utility™ is unique in that it uses a fraction of the processing power of other video players and adds vital features. The "snap shot" feature allows JTACs to save and time stamp images from his VDL feed for easy access during mission debriefs. In addition, VDL is easily accessible at all times, giving JTACs real time data of the target's movement from check in to bombs on target. FAC-US™ also integrates Meta/Ometa data with the L3 Tac-Rover. The ability to seamlessly view Meta/Ometa data gives the JTAC additional real time Situational Awareness of their CAS assets.

FAC-Utility™ integrates LTDs and LRFs like Vectronix's PLRF-15C/PLRF-25C which are in use today. FAC-US™ facilitates easy integration of LTD/LRFs with "plug and play" capability of any supported devices. FAC-Utility™ will



>> FAC-Utility™ Radio KDU's

automatically find the LTD/LRF, no ports need to be setup or maintained by the JTAC. Any shot from a LTD/LRF will be displayed on the map for further targeting or instant targeting if used in conjunction with the TIC Button™.

FAC-Utility™ integrates the PRC-117G, PRC-148, and PRC-152 into its remote KDUs. Easy access to both KDUs make configuration of the radios seamless. The KDU has the same look and feel of the radio the Operator is wearing, eliminating learning curves for Combat Mission Ready Operators who are already proficient with his radio. Advanced radio configurations can be accessed by a pull out menu to set configurations for HPW and VMF to facilitate complicated radio settings. Complex radio settings that are not practiced by an Operator are difficult to conduct with a checklist, and exponentially more difficult in the field under stress. FAC-Utility™



>> FAC-Utility™ Targeting Reticule

allows any Operator to easily use advanced radio functions without the need of a communications background. FAC-Utility™ can also integrate Harris SA giving the JTAC a clear real-time picture of friendly elements operating throughout the battlespace.

SITUATIONAL AWARENESS >>

One of the defining characteristics of a JTAC, that makes him a critical asset on the battlefield, is the ability to maintain Situational Awareness (SA). This ability allows a JTAC to maintain positive SA of his friendly forces, rack and stack aircraft, and deliver precision strikes while on the move and under fire. FAC-Utility™ amplifies the JTAC's SA capability.

The Smart Bubble gives the JTAC coordinates, elevation, distance and direction from their position to any point on the map. This gives the JTAC unprecedented SA over their domain instantly. The JTAC can develop an accurate CAS 9-Line or other CFF format from the Smart Bubble alone by accessing all the pertinent targeting data within the Smart Bubble. The Scoreboard function allows the JTAC to quickly view, manipulate, develop and transmit 9-Lines on existing points. This allows a JTAC to maintain positive control of their territory even if it spans hundreds of miles, giving him comprehensive SA during Major Combat Operations (MCO) and facilitating Ground Commander's Intent (GCI).

FAC-Utility™ can support MCO or large-scale operations by giving the Operator essential planning tools. FAC-Utility™ comes with a full suite of pre-mission planning tools that Operators can use to develop Initial Points (IPs), Keyhole, Target Reference Points, friendly naval and artillery positions giving a complete picture of the battlefield. Future versions of FAC-Utility™ will have tools to help manage airspace and battlespace.

MAPPING >>

FAC-US™ currently uses Falconview as its mapping engine. This provides three critical benefits that facilitate learning and highlights the flexibility of the software. Operators are already familiar and proficient with Falconview, eliminating time needed to train them on a new mapping platform. Secondly, Falconview maps are the most widely disseminated, making acquisition of map data very easy. Finally, using a Falconview base allows the Operator to take advantage of other Falconview Plugins and the full suite of Falconview tools already available. The modern Operator has a variety of mission sets and can easily switch from FAC-Utility™ to plug-ins in order to conduct non-fires mission and then switch back in to FAC-Utility™. The transition is seamless and reduces the need for extra equipment associated with a wide variety of mission sets.

FAC-MESSAGE EMULATOR™ [PATENT PENDING] >>

Through the development process of the FAC-US™, BDAT needed to develop a way to test the software incrementally without having ready access to aircraft for communications. This was accomplished with FAC-Message Emulator™. This software allows for the set up of two FAC-US™ systems allowing them to communicate using VMF and the tactical radios that dismounted Operators typically use. One Black Diamond kit runs FAC-Utility™ (i.e. JTAC) and the second kit runs FAC-Message Emulator™ (i.e. the Aircraft).

FAC-Message Emulator™ allows for easy, low-cost, high-yield JTAC training prior to going to the range under live aircraft. This type of training develops inexperienced JTACs in the field without using valuable and expensive flight hours. Junior JTACs consistently make basic mistakes on the range, from improper radio calls to poor "Talk Ons". FAC-Message Emulator™ allows the JTAC-Instructor to run through a mission more accurately in a field setting as opposed to strictly classroom curriculum, yielding greater results. FAC-Message Emulator™ represents a significant return on investment by maximizing the use of live aircraft as efficiently as possible by ensuring that JTACs are trained on DACAS before the aircraft leaves the runway. Once under live aircraft, more calls can be conducted in a timely manner, increasing currency training per flight hour and sharpening skill sets. Furthermore, a JTAC can rehearse real-world missions and war game using FAC-Message Emulator™. FAC-Message Emulator™ is a tool that can be used for training, tactics development, war gaming, mission rehearsals, simulation, and more.

>> FAC-Utility™



>> FAC-Message Emulator™

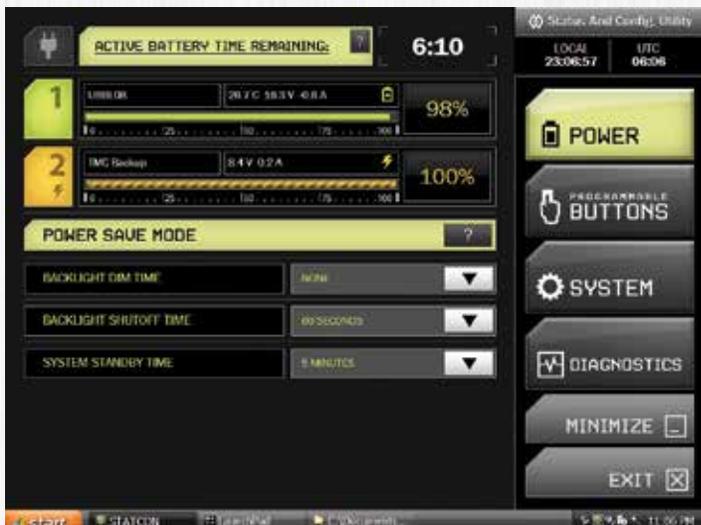
SOFTWARE >> MTS CORE APPLICATIONS

CORE APPLICATIONS >>

StatCon, **LaunchPad**, and the **Radio Software KDU** come pre-installed as a factory loaded software application designed to make the MTS more user friendly and enhance system awareness. For example, StatCon provides critical system information such as battery life, charge status, and allows the user to toggle system modes. This includes NVG on/off and the system display port toggle. The user can choose to operate the MTS with the Universal Tactical Display (UTD) or another display device such as an HMD.

BDAT has also focused on creating applications that will increase the operator's ability to navigate Windows® with a touchscreen display. This includes creating applications with larger buttons, icons, and text fields for operating with a gloved hand. LaunchPad presents the user with an icon based interface more like that of an Android device or smart phone.





STATUS AND CONFIGURATION UTILITY >> STATCON

StatCon is the central control for the MTS hardware. It provides system battery information, peripheral power mode control, operator programmable button control, system options, Built-in-Test (BIT) results and other diagnostic information.



LAUNCHPAD

LaunchPad is an easy to use, graphical application that serves as a central launch point for all important applications. It supports multiple pages, large icons for gloved finger use, and is reconfigurable to facilitate operator preferences. Single finger launch, tap and drag scrolling make LaunchPad user friendly for the operator who has one hand on his weapon and the other only has a brief moment to access data. Anyone using a smart phone or tablet will be at home at the LaunchPad screen.



VIRTUAL KEYBOARD (VKB)

Pressing the VKB quick-launch button on the UTD (physical button on the right side of the display) will launch an on-screen keyboard that docks to the bottom of the screen. The VKB allows for text input, including all the keys available on a standard keyboard.



RADIO SOFTWARE KDU

The Harris 117G and 152 radios can be remote controlled using the KDU (Keypad Display Unit). The operator can keep the radio stowed and still access all radio functions via a large, easy to use graphical display. There is also a software KDU for the Coastal Defense MVR-IV and the Thales AN/PRC-148 MBITR/JEM.

SOFTWARE >> MTS CORE APPLICATIONS





SOFTWARE >> ADDITIONAL UTILITIES

APPCONFIG >>

AppConfig provides a simple and easy way to save and restore your application configuration. Once you launch, size, and locate all your applications, AppConfig memorizes that configuration as a preset. Presets can be restored with a single tap on the AppConfig GUI, via a LaunchPad shortcut, or P-button shortcut. All applications are automatically started and placed- allowing the operator to execute faster with less effort.

PROGRAMMABLE BUTTONS >>

The UTD has 5 software re-programmable hard buttons that can be designated by the user to perform specific tasks. These tasks include system events such as Windows Standby, screen events such as Screen Capture to a file, AppConfig shortcuts, or Video Port Switching. The buttons are configurable using a simple, graphical application.

BIT >>

Both the UTD and the TMC perform a Built-In-Test on every power up. The results of these tests are displayed on the Diagnostic Screen in the Status and Configuration Utility (StatCon). The presence of peripherals such as the HMD or GPS as well as the internal operation of system components are displayed. The BIT tests can also be run after startup by the user. These results are also displayed on the Diagnostic Screen in StatCon.

GPS BROADCAST >>

GPS Broadcast is a simple utility that allows certain GPS aware applications to receive GPS data without locking the GPS COM port. GPS Broadcast grabs the raw GPS data before it gets to the COM port, and sends that data via UDP to certain applications. These applications have to support receiving NMEA or CoT (Cursor on Target) data via UDP. Applications such as EtherView, Moving Map Tool, and ST Toolkit can use the data GPS Broadcast sends.

TACTICAL NYLON >> PLATE CARRIER INTEGRATION



TACTICAL NYLON >>

The APEX Pradator System and the MTS are designed to adapt to any tactical plate carrier. BDAT also offers fully integrated wearable solutions that include modifications to existing platforms for optimized cable routing and component placement. BDAT systems are currently designed to work with a RBAV (Releasable Body Armor Vest), Eagle Aero, and the TYR XFrame. These solutions include a patented cummerbund design that allows cables to be more easily routed and distributed to peripheral devices. Cables are securely covered to prevent snag hazards and cable damage, and the removable cummerbund can be easily reconfigured depending on mission requirements and user preferences. Contact Black Diamond at www.bdatech.com to customize a system to fit your needs.



CABLE MANAGEMENT >>

BDAT has developed a patented cummerbund with cable management features to cover and protect the cables of devices mounted on or in the cummerbund. It features an easy-access cable stow panel that allows the operator to easily re-configure cable routing as necessary. Universal Cummerbund variant shown above.



PERIPHERAL GEAR ACCESS >>

BDAT has created custom pouches for specific radios, batteries, and VDL devices for a better integrated system. This optimizes pouch load-out while reducing the overall wearable profile. Contact BDAT for a list of available pouches.



HARDWARE INTEGRATION >>

The TMC mounts to any PALS web panel using MOLLE. Cables are routed from the bottom of the unit through a pass-thru opening. The cable connector overmolds are designed with an S-bend to aid in the transition from the TMC to the inner vest panel. This same mounting method is also used in the MTS assault pack.



TACTICAL NYLON INTEGRATION >>

A plate carrier centric system does not meet the needs of every user. BDAT understands this and offers pack configurations for all our systems.

TACTICAL NYLON >> PLATE CARRIER INTEGRATION

DESIGNED WITH THE OPERATOR IN MIND >>>

Operators are very selective when it comes to their vests and rucks. Those elements are like an extension of themselves and must be comfortable or they will be put aside for something else. BDAT has developed a number of different plate carriers and other packs/bags to satisfy the varying opinions and needs of the individual operator. From simple plate carriers to load-bearing plate carriers, chargers and quick release vests to assault packs and bags, there are numerous options for the operator to find the vest or ruck to meet their needs.



I/O Hub shown stowed in cummerbund

TMC shown with elastic retention features



>> The PICO-MV/XFrame-MTS is a load-bearing plate carrier optimized for use with MTS. It features TYR Tactical's MBAV cut plate carrier that when used in conjunction with TYR's Brokos Belt (not shown) and XFrame Stays, creates the XFrame Dynamic Load Carriage system. It uses a BDAT designed cummerbund with internal cable management features, includes modified rear panel to allow cables to route into the plate carrier, and includes necessary parts for stowing MTS components.

PICO-MV/XFRAME-MTS >> TYR TACTICAL

PART NUMBER MA-0058

CUSTOM BDAT CUMMERBUND

- >> Integral I/O Hub and radio pockets
- >> Cable stow panel allows easy cable access
- >> Padded design contours torso

MTS INTEGRATION

- >> Included UTD sling, low profile solution
- >> Optional fully enclosed UTD pouch
- >> Shoulder-mounted GPS pouch
- >> Elastic T-bar restraint for mounting TMC to inside the plate carrier
- >> Button holes for strategic cable management

TACTICAL

- >> Full PALS compliant
- >> Integrated front triple MAG pouch: 5.56 standard, 7.65 available
- >> Accepts ESAPI or SOF specialty plates
- >> Supports soft armor inserts

DESIGN

- >> Made from 500D Cordura® Nylon
- >> Constructed from TYR Tactical's PV material
- >> Interior padding with FR treated spacer mesh
- >> Padded shoulder straps

PARTS INCLUDED IN ASSEMBLY

- >> Plate carrier
- >> Custom cummerbund
- >> GPS pouch
- >> UTD sling
- >> T-bar restraints
- >> 3x 5.56 MAG pouch
- >> Brokos Belt
- >> XFrame Stays

WEIGHT

- >> 3.1 lbs*
- >> Brokos Belt & XFrame Stays: 2.4 lbs*

COLORS & SIZES

Please contact BDAT to configure your vest, part number based upon color and size of the load carriage system

*Note: Weights listed are for a medium plate carrier and load carriage system. The plate carrier includes the GPS Pouch, UTD Sling, and Elastic T-bar Restraints. Does not include UTD holder/pouch or armor.

TACTICAL NYLON >> PLATE CARRIER INTEGRATION



I/O Hub shown in cummerbund

TMC with elastic retention features



>> The AERO-MTS is an MBAV cut plate carrier offered by Eagle Industries. It has been modified to BDAT specifications for integrating MTS. This includes integrated cable management features, modified rear panel to allow cables to route into the plate carrier, and parts for stowing MTS components. This vest comes with the Eagle Load Lift Kit (not shown) for adapting to a load carriage system.

EAGLE AERO-MTS >> EAGLE INDUSTRIES

BASE P/N **MA-0060**

CUSTOM BDAT CUMMERBUND

- >> Adjustable cummerbund length
- >> Easily removed from rear vest panel
- >> Integrated I/O Hub and radio pockets

MTS INTEGRATION

- >> Included UTD sling, low profile solution
- >> Optional fully enclosed UTD pouch
- >> Shoulder-mounted GPS pouch
- >> Elastic T-bar restraint for mounting TMC to inside the plate carrier
- >> Button holes for strategic cable management

TACTICAL

- >> Full PALS compliment
- >> Supports ESAPI/SAPI front/rear plates
- >> Supports soft armor inserts in the cummerbund
- >> Accepts 6" x 6" and 6" x 8" side plates

DESIGN

- >> Full compliment of PALS
- >> Customized rear panel for porting cables
- >> Shoulder pads with integrated GPS
- >> Integrated front MAG pocket sleeve
- >> Integrated map/admin sleeve

PARTS INCLUDED IN ASSEMBLY

- >> Load lift kit
- >> Plate carrier
- >> Custom cummerbund
- >> GPS pouch
- >> UTD sling
- >> T-bar restraints

WEIGHT

- >> Plate Carrier: 3.7 lbs*
- >> Load Lift: 2.15 lbs*

COLORS & SIZES

- MULTICAM®**
- S MA-0060-01
 - M MA-0060-02
 - L MA-0060-03
 - XL MA-0060-04

*Note: Weights listed are for a large plate carrier and load lifts. The plate carrier includes the GPS Pouch, UTD Sling, and Elastic T-bar Restraints. Does not include UTD holder/pouch or armor.



I/O Hub shown stowed in cummerbund

TMC shown with elastic retention features



>> The RBAV-MTS is a custom variant of the RBAV by BAE Systems. It has been optimized for integrating the MTS as a wearable system. This includes features for cable routing and stowing MTS components. This plate carrier features a SPEAR/BALCS cut.

RBAV-MTS >> BAE SYSTEMS ECLIPSE

BASE P/N

MA-0046

CUSTOM BDAT CUMMERBUND

- >> Integral I/O Hub and radio pockets
- >> Easily accessible cable stow panel
- >> Multiple button holes for porting cables

MTS INTEGRATION

- >> Included UTD sling, low profile solution
- >> Optional fully enclosed UTD pouch
- >> Shoulder-mounted GPS pouch
- >> Elastic T-bar restraint for mounting TMC to inside the plate carrier
- >> Button holes for strategic cable management

TACTICAL

- >> Dual inner MAG sleeves, L & R sides
- >> Supports integrated soft armor
- >> Supports ESAPI/SAPI plates
- >> Full PALS complement
- >> Integrated weapons sling retention D-rings

DESIGN

- >> Fully doff-able
- >> Made from 500D Cordura® Nylon
- >> Integrated hydration pocket
- >> 8 ft. Quick pull rescue straps

PARTS INCLUDED IN ASSEMBLY

- >> Plate carrier
- >> Custom cummerbund
- >> GPS pouch
- >> UTD sling
- >> T-bar restraints

WEIGHT

- >> 4.9 lbs*

COLORS & SIZES

MULTICAM®

- S MA-0046-01
- M MA-0046-02
- L MA-0046-03
- XL MA-0046-04

COYOTE

- S MA-0046-11
- M MA-0046-12
- L MA-0046-13
- XL MA-0046-14

*Note: Weights listed are for a large plate carrier and load lifts. The plate carrier includes the GPS Pouch, UTD Sling, and Elastic T-bar Restraints. Does not include UTD holder/pouch or armor.

TACTICAL NYLON >> ASSAULT PACKS



UTD pocket access



Elastic side walls for cable service loop retention



>> The carry bag stows the MTS in a "laptop bag" configuration. Carries the MTS components, a 5590 battery, and features a full compliment of PALS to mount optional radios and other peripherals.

CARRY BAG >>

BASE P/N

MA-0048

FEATURES

- >> Easy access UTD zipper pocket
- >> Internal cable management features
- >> Full compliment of PALS for mounting radios and other peripherals
- >> 5590 battery restraint
- >> Includes I/O Hub pouch
- >> TMC secures inside bag using elastic T-bar restraints (same as vest solution)
- >> Top and Back panel mesh construction for ventilation
- >> Integrated corner D-rings

WEIGHT

>> 2.1 lbs*

COLORS & SIZES

MULTICAM®

>> MA-0048-01

COYOTE

>> MA-0048-02



GPS Module (Inside Panel)

I/O Hub

Cables port into pack and route internally

Battery pouch platform

Side radio panels

117G radio compartment

Bottom zipper for battery access



>>> The MTS assault pack allows the system to be used in an alternate mobile configuration. The TMC, I/O Hub, GPS Module, batteries, and radios are stowed in or mounted to the pack. Cable management is integral to the design. The UTD is stowed on the front of the plate carrier and interfaces with the TMC using a cable with a quick-disconnect connection running over the shoulder.

MTS ASSAULT PACK >>> 800

BASE P/N

MA-0052

FEATURES

- >>> Stows the TMC, I/O Hub, batteries, radios, and other peripheral devices
- >>> Built-in features for supporting 117G radios
- >>> Integral cable routing/management, GPS pouch
- >>> PALS webbing for side radio placement
- >>> TMC secures to pack using elastic T-bar restraints (same as vest solution)
- >>> Designed with longer shoulder straps for use over a tactical vest
- >>> Built-in hydration bladder compartment

WEIGHT & SIZE

- >>> 3.5 lbs*
- >>> 800 cu-in (13.10 L)

PARTS INCLUDED IN ASSEMBLY

- >>> Pack
- >>> I/O Hub Pouch
- >>> T-Bar Elastic Restraints
- >>> UTD Sling
- * Battery and radio pouches sold separately

COLORS & SIZES

- MULTICAM® >>> MA-0052-00
- COYOTE >>> MA-0052-01

TACTICAL NYLON >> ASSAULT PACKS



>> BDAT's assault pack 1200 is an enhanced design with new features to stow the Tactical I/O Hub, added storage capacity, and the integration of a modular Beaver Tail add-on. The pack also retains the capability to stow the TMC, GPS Module, dual 5590 Batteries, dual hand-held radios, and a Manpack radio. Cable management is integral to the design. The UTD can be carried in the pack or worn on the operator using the UTD Sling (included) or the UTD Pouch (sold separately).



MTS ASSAULT PACK >> 1200 KIT

BASE P/N **MA-0074**

INTEGRATION

- >> Stows the TMC, Tactical I/O Hub, batteries, radios, and other peripheral devices
- >> Built-in features for supporting an AN/PRC-117 Manpack Radio
- >> Integral cable routing/management
- >> Antenna port access
- >> Elastic restraint for the GPS Module
- >> Slip-pocket for easy Tactical I/O Hub access
- >> Side MOLLE panels for radio and battery pouches
- >> TMC secures to pack using elastic T-bar restraints
- >> Modular Beaver Tail for added storage capacity
- >> Built-in hydration bladder compartment, both in Beaver Tail and primary pack

>> Shoulder straps feature integral cable management, thick padding, and a sternum strap

WEIGHT & SIZE

- >> 3.75 lbs. with Beaver Tail // 3.2 lbs. without Beaver Tail
- >> 1200 cu-in (19.66 L)
- >> Assault Pack 1200

PARTS INCLUDED IN ASSEMBLY

- >> Beaver Tail Add-On
- >> T-Bar Restraints (pair)
- >> UTD Sling
- * Battery and Radio Pouches Sold Separately

COLORS & SIZES

- MULTICAM® >> MA-0074-01
- COYOTE >> MA-0074-02



The Cummerbund cable management

The Cummerbund loaded on a plate carrier



>> BDAT offers a Universal Cummerbund Adapter option for integrating MTS with any tactical plate carrier or vest. It is composed of two components: the Cummerbund Adapter Panel and the BDAT Universal Cummerbund. When used in conjunction, these parts allow MTS cables to be properly routed and stowed in virtually any plate carrier.

Cables plugged into the TMC can be fed into the top seam of the Adapter Panel and then distributed through the universal cummerbund. This prevents cable exposure, snag hazards, and unnecessary cable wear and tear. This solution is a quick and easy way to adapt MTS to any kit without permanent modification to the user's existing gear.

UNIVERSAL CUMMERBUND >>KIT

COLORS & SIZES

	Small/Medium	>> MA-0063-01
MULTICAM®	Large/X-Large	>> MA-0063-02
	Small/Medium	>> MA-0063-11
COYOTE	Large/X-Large	>> MA-0063-12

TACTICAL NYLON >> CARRIER SOLUTIONS



APEX EUD POUCH FOR FZ-M1 >>

PART NUMBER MM-0134

The APEX EUD Pouch is an ultra low profile solution for mounting the FZ-M1 Panasonic Toughpad to a tactical plate carrier. It attaches to the front MOLLE panel and allows the user to easily flip down the display for easy viewing. Requires the provided 550 cord to be threaded into the PALS webbing to function properly.

FEATURES

- >> Lightweight
- >> Constructed of durable Hypalon material
- >> Easy one-handed operation using a single pull tab
- >> Adjustable display viewing angle
- >> Attaches using MOLLE
- >> Velcro front panel

PHYSICAL

- >> 7.75" (W) x 8.75" (H) x .125" (D)
- >> 3.1 oz

COLORS & SIZES

MULTICAM >> MM-0134-01



UTD SLING >>

PART NUMBER MM-0059

The UTD sling is an ultra low profile solution for mounting the UTD to a tactical plate carrier. It attaches to the front MOLLE panel and allows the user to easily flip down the display for easy viewing. Requires the provided 550 cord to be threaded into the PALS webbing to function properly.

FEATURES

- >> Lightweight
- >> Constructed of durable Hypalon material
- >> Easy one-handed operation using a single pull tab
- >> Adjustable display viewing angle
- >> Attaches using MOLLE
- >> Velcro front panel

PHYSICAL

- >> 7.75" (W) x 8.75" (H) x .125" (D)
- >> 3.1 oz

COLORS & SIZES

MULTICAM® >> MM-0059-00

COYOTE >> MM-0059-01



UTD POUCH >>

PART NUMBER MM-0032

The UTD pouch is a fully enclosed solution for stowing the UTD. The display is retained against the inside front panel and can be flipped down for easy viewing by unzipping the pouch. The viewing angle can be adjusted with Velcro straps

FEATURES

- >> Zippered MOLLE pouch solution for stowing the UTD Keeps out dirt and debris
- >> Adjustable viewing angle
- >> Built-in features for cable retention
- >> PALS compliment for attaching other gear to the pouch exterior

PHYSICAL

- >> 9.75" (W) x 6.75" (H) x 1.75" (D)
- >> 13.5 oz

COLORS & SIZES

MULTICAM® >> MM-0032-02

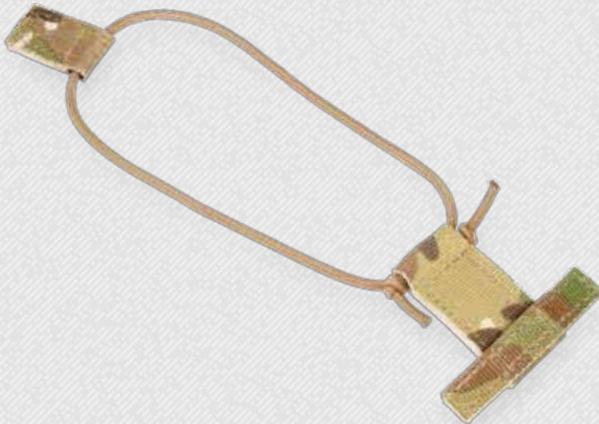
COYOTE >> MM-0032-01

TACTICAL NYLON >> POUCHES & ACCESSORIES**GPS POUCH >>**PART NUMBER **MM-0029**

Captures the GPS Module assembly. Mounts using Velcro to the shoulder strap of a plate carrier/vest.

COLORS & SIZES**MULTICAM®** >> MM-0029-06**COYOTE** >> MM-0029-07**I/O HUB POUCH >>**PART NUMBER **MM-0074**

Allows the Tactical I/O Hub to be mounted to any MOLLE platform. Used with the MTS assault pack and carry bag configurations.

COLORS & SIZES**MULTICAM®** >> MM-0074-01**COYOTE** >> MM-0074-02**T-BAR W/ELASTIC RESTRAINT >>**PART NUMBER **MM-0033-00**

Part for mounting the Tactical Mission Controller (TMC) to a MOLLE platform. Included with any BDAT plate carrier/vest or pack. Replacements can be ordered in pairs.

COLORS & SIZES

N/A

**ADMIN POUCH >>**PART NUMBER **MM-0082**

Add-on admin pouch that attaches to the front of the UTD Sling. Provides a pocket for a map, note pad, and other miscellaneous supplies. Also features pen holder slots. Note: UTD Sling, P/N MM-0059, required for use but sold separately.

COLORS & SIZES**MULTICAM®** >> MM-0082-01**COYOTE** >> MM-0082-02

TACTICAL NYLON >> POUCHES & ACCESSORIES



UNIVERSAL RADIO POUCH >>

PART NUMBER MM-0116

The Universal Radio Pouch is an expandable pouch designed to fit various sized radios and connector interfaces. It features pleated side panels with laced shock cord that wraps around the pouch. Pull the Velcro tab over the radio and adjust the shock cord at the bottom. This design alleviates the need to have a custom pouch fitted to each radio with unique cut-outs depending on the connector interface. The pouch fits, but is not limited to the following devices: *PRC-152, PRC-148, RT-1922, RF7800T, SIR Tactical Rover, MVR-IV/VI Receiver, Strikehawk VDL, Persistant Systems, MPU-4, DAGR.*

COLORS & SIZES

- MULTICAM® >> MM-0116-01
- COYOTE >> MM-0116-02



5590 BATTERY POUCH >>

PART NUMBER MM-0071

Carries one 5590 or 2590 battery.

COLORS & SIZES

- MULTICAM® >> MM-0071-01
- COYOTE >> MM-0071-02



LI-145 BATTERY POUCH >>

PART NUMBER MM-0069

Carries one LI-145 rechargeable battery.

COLORS & SIZES

- MULTICAM® >> MM-0069-01
- COYOTE >> MM-0069-02



LI-80 BATTERY POUCH >>

PART NUMBER MM-0070

Carries one LI-80 rechargeable battery.

COLORS & SIZES

- MULTICAM® >> MM-0070-01
- COYOTE >> MM-0070-02



OPERATOR BORN FIT >>

BDAT's custom fabrics solutions are growing. If you are integrating APEX or MTS with a peripheral that does not have a custom pouch or soldier born solution, BDAT can help. Contact Black Diamond Advanced Technology today for more details. **Minimum order quantity required.*

CABLES >> CONNECT WITH CONFIDENCE



CONNECT WITH CONFIDENCE >>

In addition to a full compliment of off-the-shelf APEX and MTS cables for a variety of tactical peripherals listed in this section, BDAT can provide custom cables including rapid manufacturing to meet your specific interface requirements. Let BDAT leverage our years of wearable military system integration experience to reduce your project risk and cycle time; contact BDATECH.com today.



J13

J12

J11



J1

J8

J2

J3

J4

J5

J6

J7

CONNECTOR REFERENCE >>

- >> 1 USB 2.0/3.0 DATA & POWER PORT
- >> 2 USB 2.0/3.0 DATA & POWER PORT
- >> 3 USB 2.0/3.0 DATA & POWER PORT
- >> 4 USB 2.0/3.0 DATA & POWER PORT
- >> 5 EUD PORT
- >> 6 POWER PORT
- >> J1 GPS
- >> J2 HUB
- >> J3 BATTERY
- >> J4 VDL
- >> J5 UTD
- >> J6 RADIO 2
- >> J7 RADIO 1
- >> J8 HMD
- >> J11 TMC
- >> J12 USB
- >> J13 AUDIO

APEX

RADIO CABLES



AN/PRC-117G
RADIO CABLE ASSEMBLY >>
P/N >> **CB-0325-00**

Connects the PRC-117G radio tablet to APEX. Provides data and KDU interface. Recommend use with CB-0345-00 or CB-0357-00 Extension Cable.

Length: **41"** >> Port: **1-4**



AN/PRC-152/152A
RADIO CABLE ASSEMBLY >>
P/N >> **CB-0320-00**

PRC-152/152A cable that connects to APEX. Provides data connection to the PRC-152/152A radio and power through the Wedge.

Length: **40"** >> Port: **1-4**



WAVE RELAY RADIO w/MPU4
RADIO CABLE ASSEMBLY >>
P/N >> **CB-0341-00**

Cable to connect Wave Relay (MPU4) radio to APEX. Provides power and data interface. Also provides audio interface via 6-pin audio connector.

Length: **40"** >> Port: **1-4**



AN/PRC-148 MBITR
RADIO CABLE ASSEMBLY >>
P/N >> **CB-0321-00**

PRC-148 cable that connects to APEX. Provides data connection to the PRC-148 radio and power through the Wedge.

Length: **40"** >> Port: **1-4**



RF-7800S-TR
RADIO CABLE ASSEMBLY >>
P/N >> **CB-0343-00**

Cable to connect RF-7800S-TR radio to APEX. Provides data interface.

Length: **40"** >> Port: **1-4**



RT-1922/I/O-HUB
RADIO CABLE ASSEMBLY >>
P/N >> **CB-0344-00**

Cable to connect RT-1922 radio and I/O Hub to APEX. Provides power and data interface to radio and I/O Hub.

Length: **41"** >> Port: **1-4**



RT-1922/USB/RS-232
RADIO CABLE ASSEMBLY >>
P/N >> **CB-0356-00**

Cable to connect RT-1922 radio to APEX. Provides power and data interface to the radio. Also includes USB receptacle and RS232 dongle connections.

Length: **41"** >> Port: **1-4**

APEX

POWER CABLES



DUAL 5590
POWER SUPPLY >>
P/N >> **CB-0323-00**

Used for powering the system on a BA-5590 or BB-2590 battery. Second battery connector used for hot swapping. Required for Radio Power WEDGE operation in battery eliminator mode.

Length: **40"** >> Port: **6 (Power Port)**



12/V DC VEHICLE ADAPTER
POWER SUPPLY >>
P/N >> **CB-0336-00**

Input power cable to APEX via cigarette lighter plug. Vehicle power adapter plugs into the Dual 5590 cable or 2590 Charger.

Length: **72"** >> Port: **6 (Power Port)**



AC ADAPTER 5590 RECEPTACLE
POWER SUPPLY >>
P/N >> **PS-0010-00 (US PLUG)**
P/N >> **PS-0011-00 (EU PLUG)**
P/N >> **PS-0012-00 (AU PLUG)**

Used for powering the system on 110/220V outlet power. Plugs into the Dual 5590 cable or 2590 Charger.

Length: **36"** (cable only) >> Port: **6 (Power Port)**



2590 CHARGER w/5590-Y
POWER SUPPLY >>
P/N >> **CB-0362-00**

Connects to APEX to provide power to the system from a 2590 battery. When external power (AC or Vehicle) is connected to the 5590 dongle it powers the system and recharges the 2590 battery.

Length: **42"** >> Port: **6 (Power Port)**

APEX MISCELLANEOUS CABLES +



MINI-USB HARD DRIVE EXPANSION CABLE ASSEMBLY >>

P/N >> **CB-0174-00**
 Connects to Tactical I/O Expansion HUB circular USB connector and provides mini-USB port for peripheral device such as a Hard Drive.
 Length: **10"** >> Port: **J12**



PLRF 15C/25C CABLE ASSEMBLY >>

P/N >> **CB-0243-02**
 Cable to connect Vectronix PLRF 15C/25C to Tactical I/O Expansion Hub J12 circular USB connector.
 Length: **67"** >> Port: **J12**



USB 3.0 TYPE-A PLUG PERIPHERAL RECEPTACLE ADAPTER >>

P/N >> **CB-0363-00**
 Cable adapter that connects to APEX peripheral cables and has a USB 3.0 Plug. Used for connecting peripheral devices directly to any USB (2.0 or 3.0) enabled computer.
 Length: **12"** >> Port: **1-4**



USB 3.0 RECEPTACLE CABLE ASSEMBLY >>

P/N >> **CB-0364-00**
 Cable adapter that connects to APEX and has a USB 3.0 receptacle. Used for connecting USB 2.0 or 3.0 devices to APEX.
 Length: **12"** >> Port: **1-4**



EUD EXTENSION CABLE EUD EXTENSION CABLE ASSEMBLY >>

P/N >> **CB-0327-00**
 Extension cable for the EUD. Goes between APEX and the EUD cable (e.g. CB-0324-00)
 Length: **36"** >> Port: **5**



USB EXPANSION, I/O HUB CABLE ASSEMBLY >>

P/N >> **CB-0345-00**
 Cable to connect I/O Hub to APEX and a dongle with peripheral receptacle (for use as a peripheral cable extension). Provides power and data interface to I/O Hub.
 Length: **45"** >> Port: **1-4**



HUB, DAISY CHAIN CABLE ASSEMBLY >>

P/N >> **CB-0335-00**
 Connects two (2) APEX Hubs together. Both APEX Hubs must be separately powered.
 Length: **40"** >> Port: **1-4**



EUD FZ-M1 DOCK END USER DEVICE CABLE ASSEMBLY >>

P/N >> **CB-0324-00**
 Connects the FZ-M1 tablet to APEX. Provides power to the tablet and USB 3.0 interface.
 Length: **40"** >> Port: **5**



USB EXTENSION/RS-232 PERIPHERAL EXTENSION CABLE ASSEMBLY >>

P/N >> **CB-0357-00**
 Peripheral extension cable to APEX. Also includes USB receptacle and RS232 dongle connections.
 Length: **41"** >> Port: **1-4**



EUD, USB TYPE-A PLUG CABLE ASSEMBLY >>

P/N >> **CB-0360-00**
 Cable to connect APEX to any USB (2.0 or 3.0) enabled computer.
 Length: **40"** >> Port: **5**



MODULAR APEX GPS APEX GPS CABLE ASSEMBLY >>

P/N >> **CB-0385-00**
 Connects Modular GPS Puck (MA-0086-00) or RC RSR SAASM Puck to APEX Peripheral Port and has "Y" with Peripheral Port Extension (APEX USB Receptacle).
 Length: **48"** >> Port: **1-4**



TACTICAL ROVER (SIR) VDL >>

P/N >> **CB-0317-00**
 Connects the Tac-Rover to APEX for power and data (Tac-Rover battery not needed). Digital video only (no analog).
 Length: **40"** >> Port: **1-4**

MTS CORE MTS CABLES



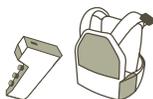
UTD CABLE WITH Q.D. >>
 P/N >> **CB-0129-00**
 Cable for connecting the UTD to one of the UTD Extension Cables.
 Length: **27"** >> Port: **J5**



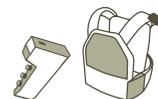
UTD EXTENSION CABLE VEST >>
 P/N >> **CB-0127-01**
 Extension cable from the TMC to the front of the vest providing a 90 degree quick-disconnect to the UTD cable. Intended for routing in the cummerbund.
 Length: **30"** >> Port: **J5**



I/O HUB CABLE
 P/N >> **CB-0171-01 STANDARD (USED FOR VEST CONFIG)**
 Cable for connecting the I/O Hub to the TMC. Cable also terminates with the same power port connector located on the TMC for easy recharging using MTS power cables (CB-0121, CB-0122, PS-0002-00, CB-0242).
 Length: **24.5"** >> Port: **J2**



I/O HUB CABLE
 P/N >> **CB-0219-00 ASSAULT PACK CONFIG (LONGER)**
 Cable for connecting the I/O Hub to the TMC when using the pack. Cable also terminates with the same power port connector located on the TMC for easy recharging using MTS power cables (CB-0121, CB-0122, PS-0002-00, CB-0164).
 Length: **46"** >> Port: **J2**



UTD CABLE
 P/N >> **CB-0169-00**
 Cable for connection the UTD directly to the TMC. Can be used to run the cable over the shoulder. (Not for use with BAE RBAV Eclipse)
 Length: **48"** >> Port: **J5**



UTD EXTENSION CABLE ASSAULT PACK >>
 P/N >> **CB-0201-00**
 Extension cable from the TMC to the front of the vest providing an in-line quick-disconnect to the UTD cable. Used for over-the-shoulder cable routing.
 Length: **38"** >> Port: **J5**



MTS RADIO CABLES



AN/PRC-117G RADIO >>
 P/N >> **CB-0301-00**
 Connects the AN/PRC-117G Radio to the TMC for KDU operation and data communication. Typically used with the Radio Extension Cable (CB-0299).
 Length: **41"** >> Port: **Q.D.** (Extension Cable)



AN/PRC-117F RADIO >>
 P/N >> **CB-0128-00**
 Connects the AN/PRC-117F Radio to the TMC for data communication. Typically used with the Radio Extension Cable (CB-0301).
 Length: **41"** >> Port: **Q.D.** (Extension Cable)



AN/PRC-152 RADIO >>
 P/N >> **CB-0253-00**
 Connects the AN/PRC-152 Radio to the TMC for KDU operation and data communication. Also connects to Wedge for battery eliminator or battery charging.
 Length: **38"** >> Port: **J6/J7**



AN/PRC-148 MBITR RADIO >>
 P/N >> **CB-0252-00**
 Connects the AN/PRC-148 MBITR Radio to the TMC for data communication and KDU operation. Also connects to Wedge for battery eliminator or battery charging.
 Length: **38"** >> Port: **J6/J7**



RT-1922 MICROLIGHT >>
 P/N >> **CB-0159-00**
 Connects the MicroLight Radio to the TMC for data communications.
 Length: **20"** >> Port: **J6/J7**



RT-1922 KEY FILL MICROLIGHT >>
 P/N >> **CB-0209-00**
 Key fill cable for the MicroLight radio.
 Length: **13.5"** >> Port: **N/A** (MICROLIGHT PORT)





7800S-TR RADIO >>

P/N >> **CB-0183-00**

Connects the 7800S-TR Radio to the TMC for data communications

Length: **24"** >> Port: **J6/J7**



EXTENSION CABLE MAN-PACK >>

P/N >> **CB-0299-00**

For use when carrying a man-pack radio in an assault pack. Creates a quick-disconnect at the front of the vest. Typically connects to the AN/PRC-117G (CB-0301) or AN/PRC-117F Radio Cable (CB-0128).

Length: **28"** >> Port: **J6/J7**



PRC 148/EPLRS SIDE CONNECT >>

P/N >> **CB-0257-00**

Connects to PRC-148 Radio for data and KDU and to MicroLight radio for data and power. Also connects to Wedge for battery eliminator or battery charging.

Length: **39"** >> Port: **J6/J7**



PRC 152/EPLRS SIDE CONNECT >>

P/N >> **CB-0258-00**

Connects to PRC-152 Radio for data and KDU and to MicroLight radio for data and power. Also connects to Wedge for battery eliminator or battery charging.

Length: **41"** >> Port: **J6/J7**



WAVE RELAY WITH AUDIO >>

P/N >> **CB-0194-00**

Connects to J6 or J7 ports on the TMC to provide power and data to the Persistent Systems Wave Relay Radio. Also includes an audio dongle for voice communications.

Length: **38"** >> Port: **J6/J7**



RT-1922 ANTENNA MICROLIGHT >>

P/N >> **AN-0007-00**

Extension cable from the TMC to the front of the vest providing an in-line quick-disconnect to the UTD cable. Used for over-the-shoulder cable routing.

Length: **27"** >> Port: **N/A (MICROLIGHT PORT)**

MTS

POWER CABLES



BA-5590 BATTERY CABLE >>

P/N >> **CB-0122-01**

Used for powering the system on a BA-5590 or BB-2590 battery.

Length: **25"** >> Port: **J3**



DUAL 5590 BATTERY CABLE >>

P/N >> **CB-0242-00**

Used for powering the system on a BA-5590 or BB-2590 battery. Second battery connector used for hot swapping. Required for Radio Power WEDGE operation in battery eliminator mode.

Length: **39.5"** >> Port: **J3**



AC ADAPTER POWER SUPPLY >>

P/N >> **PS-0006-00 (US PLUG)**

P/N >> **PS-0007-00 (EU PLUG)**

P/N >> **PS-0008-00 (AU PLUG)**

Used for powering the system on 110/220V outlet power.

Length: **44"** (cable only) >> Port: **J3/J14**



DC VEHICLE ADAPTER POWER SUPPLY >>

P/N >> **CB-0164-00**

Vehicle power adapter plugs directly into the TMC power port or the I/O Hub Y-Cable (CB-0171).

Length: **60"** >> Port: **J3/J14**



LI-145/80/CONFORMAL BATTERY CABLE >>

P/N >> **CB-0121-00**

Used for powering the system on a LI-80 or LI-145 battery.

Length: **17"** >> Port: **J3**

MTS **VDL CABLES** 



STRIKEHAWK
 VDL >>
 P/N >> **CB-0188-00**
 Connects the Strikehawk video down-link receiver to the TMC.
 Length: **24"** >> Port: **J4**



RF-7800T
 VDL >>
 P/N >> **CB-0101-00**
 Connects the RF-7800T video down-link receiver to the TMC.
 Length: **30"** >> Port: **J4**



L3 SIR
 VDL >>
 P/N >> **CB-0178-00**
 Connects the SIR video down-link receiver to the TMC. The SIR is also powered through this connection eliminating the need for a separate battery.
 Length: **24"** >> Port: **J4**



MVR-VI
 VDL >>
 P/N >> **CB-246-00**
 Connects the MVR-VI video down-link to the TMC.
 Length: **24"** >> Port: **J4**



MVR-IV W/BATTERY ELIMINATOR
 VDL >>
 P/N >> **CB-0192-00**
 Connects the MVR-IV video down-link receiver to the TMC.
 Length: **24"** >> Port: **J4**



RF-7800T W/BATTERY ELIMINATOR
 VDL >>
 P/N >> **CB-0238-00**
 Connects RF-7800T W/Battery Eliminator to the TMC.
 Length: **30"** >> Port: **J4**

MTS **AUDIO CABLES** 



RADIO AUDIO EXTENSION
 MAN-PACK >>
 P/N >> **CB-0176-00**
 Connects a headset (or PTT device) and radio to the I/O Hub. For use when carrying a man-pack radio in an assault pack. Creates a quick-disconnect over the shoulder along the pack shoulder strap when interfaced with the Man-Pack Radio Audio Cable (CB-0152). Requires CB-0152.
 Length: **40"** >> Port: **J13**



AUDIO Y-CABLE
 AUDIO >>
 P/N >> **CB-0175-00**
 Connects a handheld radio and a headset (or PTT device) to the I/O Hub using the audio port.
 Length: **40"** >> Port: **J13**



RADIO AUDIO EXTENSION
 MAN-PACK >>
 P/N >> **CB-0152-00**
 Cable for connecting the UTD to one of the UTD Extension Cables. Requires CB-0176-00.
 Length: **41"** >> Port: **Q.D. (Extension Cable)**



6-PIN AUDIO
 HEADSET >>
 P/N >> **CB-0173-00**
 Connects headset to system for audio in/out.
 Length: **12"** >> Port: **J13**

MTS **MISCELLANEOUS CABLES** 



VUZIX TAC-EYE ADAPTER
 HMD >>
 P/N >> **CB-0110-00**
 Connects the Vuzix Tac-Eye LT HMD to the TMC. Provides an in-line quick-disconnect interface between the TMC and the HMD device.
 Length: **10"** >> Port: **J8**



L3 FUSION GOGGLE ADAPTER
 HMD >>
 P/N >> **CB-0190-00**
 CABLE, HMD, L3 Fusion Goggle Adapter. Must also have P/N FGE-010-A1 only sold by L3.
 Length: **9.5"** >> Port: **J8**



SATA INTERFACE

ADAPTER >>

P/N >> **CB-0229-00**

Adapter cable for connecting the TMC Solid State Hard Drive to an industry standard connector for imaging drives.

Length: **12"** >> Port: **N/A**



ETHERNET ADAPTER

RJ45 ETHERNET ADAPTER >>

P/N >> **CB-0162-02 (RADIO PORT)**

P/N >> **CB-0088-00 (VDL PORT)**

Short adapter cable with standard network jack. Plugs into either radio port, or VDL depending upon P/N.

Length: **8"** >> Port: **J6/J7/J4**



MINI-USB HARD DRIVE

EXPANSION CABLE ASSEMBLY >>

P/N >> **CB-0174-00**

Connects to Tactical I/O Expansion HUB circular USB connector and provides mini-USB port for peripheral device such as a Hard Drive.

Length: **10"** >> Port: **J12**



DAGR ADAPTER

MISC >>

P/N >> **CB-0136-01**

Adapter cable for connecting the DAGR GPS device to the TMC (in place of the commercial GPS module, MA-0031-02).

Length: **35"** >> Port: **J1**



FOB ADAPTER

VGA, USB >>

P/N >> **CB-0200-00**

Adapter cable allows an external monitor and USB input device (mouse/keyboard) to be used with the TMC. Plugs into the HMD port.

Length: **36"** >> Port: **J8**



PLRF15C/25C

HUB >>

P/N >> **CB-0243-02**

Cable to connect Vectronix PLRF 15C/25C to MTS Tactical Hub J12 circular USB connector.

Length: **67"** >> Port: **J12**



117G KDU PORT ADAPTER

MISC >>

P/N >> **CB-0247-00**

Connects the 117G radio to a standard DB9 serial port on a computer.

Length: **48"** >> Port: **J13**





BLACK DIAMOND
ADVANCED TECHNOLOGY

CONTACT

2301 E Yeager Dr.
Chandler, Arizona 85286

P 855 855-BDAT(2328)

F 480 705-4216

E sales@bdatech.com

W www.bdatech.com

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