

IMT Standards IMT Standards Oversight Committee Government of Alberta	Effective Date: 2010-07-08 Scheduled Review: 2020-04-04 Last Reviewed: 2019-04-04 Type: Technical
Standard number - A000004	
Notebook – Rugged – Laptop	
Category: Hardware Keywords: Notebook	

Description of Standard

The standards below are for the selection of Notebooks – Fully Rugged Configuration. The system is a multi-core, 64-bit processor based ruggedized notebook. This notebook is meant for tasks where mobility is required and it is expected to endure and operate in severe environmental conditions.

Standard Specification

REQUIRED STANDARD SPECIFICATIONS

The Rugged Laptop must be certified through the Windows Logo Program and parts must be available for minimum 5 years after end of product life and be stocked in Canada.

The Rugged Laptop must support the following standard specifications;

Operating System	<ul style="list-style-type: none"> • Windows 10
CPU, Memory and Storage	<ul style="list-style-type: none"> • Multi-Core mobile processor (CPU), Intel i5 Processor 2.3 GHz <ul style="list-style-type: none"> ○ vPro Support • Memory - 8 GB • Internal hard disk minimum <ul style="list-style-type: none"> ○ 250GB SSD with Heater
Interface	<ul style="list-style-type: none"> ▪ Integrated Serial port (9 - pin) • Minimum of 4 Universal Serial Bus (USB) ports, with a minimum of 1 port at USB version 3.0 • VGA (D-sub 15-pin) • HDMI (type A) ▪ Ability to add docking solution (docking station or port replicator)
Expansion Slots	<ul style="list-style-type: none"> ▪ SD Card (SDXC) Expansion Slot

Display	<ul style="list-style-type: none"> • Integrated 13" XGA display or larger with display viewable indoor and outdoor <ul style="list-style-type: none"> ○ Provide enhanced view ability in all lighting conditions including direct sunlight, due to special anti-reflective and anti-glare coatings applied to the panel ○ Maximum lowest brightness level: 2 nits ○ Minimum highest brightness level: 1200 nits ○ Integrated touch screen display ○ Concealed mode ○ Glove touch capable screen
Graphics and Sound	<ul style="list-style-type: none"> • Integrated graphics adapter • Integrated sound card
Keyboard	<ul style="list-style-type: none"> • integrated with 82-keys minimum • Integrated pressure sensitive touch pad, useable while wearing gloves • Individual key backlighting
Power Supply	<ul style="list-style-type: none"> • Battery Life of minimum 18 hours or greater on main battery • Includes battery calibration ability that will fully discharge/recharge the battery and re-sync the battery calibration so battery life indication is accurate • Includes power adapter
Communications	<ul style="list-style-type: none"> • Integrated 10/100/1000 auto-sensing Ethernet network card which includes Wake-On-LAN (WOL) • Wireless LAN (WLAN) card supporting 802.11 a/b/g/n/ac with user accessible switch to disable WLAN functionality • Bluetooth v4.0 or greater with EDR (Enhanced Data Rates) and Class 1 (100 meter range)
Durability	<ul style="list-style-type: none"> • Integrated rugged case with integrated carry handle • Secure latches and gasket covers for all external access points • Independent 3rd party MIL-STD-810G certification specifying: <ul style="list-style-type: none"> ○ Ingress Protection rating: Dust and Water: IP65 or Mil. Spec 810G Water Pressure Method 506.5 procedure I ○ Storage temperature range: -50 degrees Celsius to 70 degrees Celsius ○ Operating temperature range: -25 degrees Celsius to 60 degrees Celsius • Shock Transit Drop <ul style="list-style-type: none"> ○ At 4', 5', and 6' ○ 26 drops at each height, non-operating ○ All 78 drops must be performed on the same unit <ul style="list-style-type: none"> ▪ Must submit copy of certificate ▪ Shock mounted hard drive caddy with heater for cold climate use

Weight	<ul style="list-style-type: none"> Maximum weight of 4 kg with main battery
Size	<ul style="list-style-type: none"> Minimum 11.5"(L) x 11.9"(W) x 2.9"(H)
Security	<ul style="list-style-type: none"> Security cable lock slot

STANDARD OPTIONS

The Rugged Laptop may support the following standard options;

BIOS	<ul style="list-style-type: none"> Ability to format HDD after "X" (i.e. 3, 5, or 7) failed login attempts
Graphics and Sound	<ul style="list-style-type: none"> Integrated camera, webcam / microphone
Power Supply	<ul style="list-style-type: none"> Additional/replacement AC adapter for the notebook Power supply with power inverter and vehicle adapter (vehicle adapter to plug into cigarette lighter or equivalent power source) Secondary internal battery offering minimum 6 hours additional battery life Integrated swappable internal 8X DVD +/- RW drive. If DVD is removable, option to replace with an additional battery
Communications	<ul style="list-style-type: none"> Integrated satellite based GPS receiver (not cell phone based, 4G) HSPA+ and LTE Capable modem Integrated Mobile broadband option must be certified on all networks (BELL and TELUS) with support for HSPA and LTE backwards compatibility for each technology (when made available by service providers)
Security	<ul style="list-style-type: none"> Integrated Biometric fingerprint reader Hard disk drive lock capability
Office Docking Station	<ul style="list-style-type: none"> Docking solution must meet the following specifications: <ul style="list-style-type: none"> USB v2.0 compatible Must not interfere with notebook security lock and cable when connected to the notebook. If the docking solution has its own independent locking mechanism then the docking solution must have a security cable lock slot Auto-sensing Ethernet connection Must include its own power adapter
Vehicle Docking Station	<ul style="list-style-type: none"> Vehicle docking station with universal mount (i.e. Gamber-Johnson) <ul style="list-style-type: none"> Dual Connector for external antennas Integrated power supply Conforms to the one hour installation criteria that the

	<p>Purchaser's authorized vehicle dock installation provider must meet with no additional costs for parts or labor</p> <ul style="list-style-type: none">o Compatible with existing (400+ units over 3 ministries) mounts and docks (Gamber-Johnson 7160-0263-13 & 7160-0318-12) or cover cost to change to new infrastructure (adhering to existing wiring and installation standards).
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Where to Apply This Standard

This applies to all Government of Alberta Ministries.

Authority and Exceptions

Internal Use Only

Supporting Documentation

Not applicable.

Owner

Service Alberta, Office of the Corporate CIO, Enterprise Operations and Infrastructure, Technical Solutions Architecture Team – Bundle 3 Oversight

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Additional Information

Audience	GOA
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