

## RLC-3G RUGGED LAPTOP COMPUTER

Reliable in the Extreme



# MYMILTOPE

With a slimmed down design and lighter weight, the RLC-3G is still the militarized laptop that you can count on in any condition. Meeting all EMI/C requirements, the rugged design delivers faster, more powerful performance in a lighter, more versatile package, when performance counts. Add the graphics capability in the RLC-3G, and you have an unbeatable combo of computers. VT Miltope, serving those who serve.



### RLC-3G Features and Functions:

- Faster, more powerful performance in a rugged portable computing system for military tactical operations
- Features Intel® Core™ 2 Duo processor T9400 technology
- 15.4" 1280x800 WXGA, Sunlight Readable AMLCD; optional WSXGA+1680x1050
- Delivers the fastest-yet 3D video thanks to it's ATI E4690 discreet graphics solution with 512 MB dedicated video memory
- Industry leading five-year warranty



## SPECIFICATIONS

**OPERATING SYSTEM:** Windows® 7 32bit (Vista or XP downgrade available IAW Microsoft® licensing provisions) Linux® validated for initial release

**PROCESSOR:** Intel®Core™ 2 Duo processor T9400 includes a 2.53 GHz processor, 6 MB L2 cache, 1066 MHz Front Side Bus

**RAM:** Up to 8 GB Double-Data-Rate 3; Integrated mobile Intel® GM45 Express chipset with ICH9M-Enhanced; ATI E4690 with 512 MB dedicated video memory

**DISPLAY SYSTEM:** 15.4" 1280x800 WXGA, Sunlight Readable AMLCD; optional higher resolutions up to WSXGA+ (1680 x 1050)

**KEYBOARD/POINTING DEVICE:** Rugged 87 key, backlit keyboard with tactile feel, touchpad and mouse "stick"

**INTERFACES:** One RS-232/422/485-2/4 wire SW configurable, four USB 2.0, Analog (SVGA)/Digital (DisplayPort), two 10/100/1000 Ethernet, eSATA 3Gbps, audio (3) with ports, PCMCIA - two Type I or II or one Type III, Express Card/54, Smart Card, 802.11 a/b/g/n wireless

**PERIPHERALS:** Internal 5" ISO standard DVD+RW/CD-RW

**PHYSICAL:** Dimensions 15"W x 3"H x 11"D; Weight ~12 lbs. (configuration dependent)

**POWER:** Rugged AC adapter/charger and AC power cord, Single DR202 Form Factor Li-ion 7800 mAh rechargeable battery; 18-32 VDC; MIL-STD-1275B

## ENVIRONMENTALS

**TEMPERATURE:** MIL-STD-810F, Method 501.4/502.4, Procedure II (3 cycles); -18°C to +60°C, ramp of 5°C per minute (-32°C optional with heater); Procedure II (5 cycles); Non-Operating -51°C to +71°C, ramp of 5°C per minute

**NON-OPERATING THERMAL SHOCK:** MIL-STD-810F, Method 503.4, Procedure I (Steady State); (+71°C to -51°C 3 cycles, high to low = 1 cycle)

**SOLAR RADIATION:** MIL-STD-810F, Method 505.4, Procedure I, Diurnal Cycle A1 (3-24 hour continuous cycles)

**TRANSIT DROP SHOCK:** MIL-STD-810F, Method 516.5, Procedure IV; Using quick release hook or drop tester in and out of transit case, 36 inch drop any orientation total 26 drops; Functional and PCMCIA Card Operational Checks after each drop

**SHOCK:** Operating: MIL-STD-810F, Method 516.5, Procedure I (Functional); 30G, 11ms, EUT operational (3 shocks/axis/direction = 18 total shocks); Thermal: MIL-STD-810F, Method 503.4; withstand temperature change from -18°C to +21°C and +52°C to +21°C in 10 minutes

**OPERATING VIBRATION:** MIL-STD-810F, Method 514.5, Procedure I, Cat. 21 (Ground Vehicles), Figure 514.5C-1 (out of transit case); Paragraph 2.3.10.8.a.(2)

**TRANSPORTATION VIBRATION:** MIL-STD-810F, 514.5, Procedure I, Category 4, Annex A, Figure 514.5C-3 vibration profile for composite wheeled vehicles in transit case, each axis

**MINIMUM INTEGRITY TEST:** MIL-STD-810F, Method 514.5, Procedure I, Category 24, Figure 514.5C-17 in transit case, each axis, 0.04g<sup>2</sup>/Hz at 20-1000 Hz, -6dB/Octave at 1000-2000 Hz, 1hour/axis duration

**SHOCK BENCH HANDLING:** MIL-STD-810, Method 516.5, Procedure VI. Survive one 45 degree rotational drop from each bottom edge

**ALTITUDE:** MIL-STD-810F, Method 500.4, Procedures I and II; in or out of transit case, 15,000 feet operating, 40,000 feet Non-Operating; minimum test duration 1 hour using 10 ms rate of change

**DUST AND WATER:** IP 54; (Protect against dust limited ingress (no harmful deposit) and protection against water sprayed from all directions to limited ingress permitted.)

**RAIN:** MIL-STD-810F, Method 506.4, Procedure I; (in and out of transit case, 1.8 inches per hour, 20 mph wind for 30 minutes/each surface)

**HUMIDITY:** Operational: MIL-STD-810F, Method 507.4, Procedure I (10 to 95% five 48 hour aggravated temperature-humidity cycles (10 days total) at RH 95%/60°C with an operational test performed every 2 days); Non-Operational (in transit case): MIL-STD-810F, Method 507.4 Procedure II (5 to 95% five 48 hour aggravated temperature-humidity cycles (10 days total) at RH 95%/60°C with an operational test performed every 2 days)

**SALT FOG:** MIL-STD-810F, Method 509.4; (in transit case, 5±1% aqueous salt)

**SAND/DUST:** MIL-STD-810F, Method 510.4, Procedures I and II; out of transit case, 20 mph ± 3 mph for 30 minutes/surface, sand concentration 2.2 ± .5 g/m<sup>3</sup>, dust concentration of 10.6 ± .7 g/m<sup>3</sup>

**FUNGUS:** MIL-STD-810F, Method 508.5; in transit case certification materials do not support fungal growth)

**EMI/EMC:** MIL-STD-461E Radiated Emissions (RE101-1 and RE102-3), paragraph 5.15 and 5.16; Radiated Susceptibility (RS103 and RS105) paragraph 5.19 (2 MHz to 18 GHz) and 5.20; Conducted Susceptibility (CS101, CS114, CS115, and CS116) paragraph 5.4 and 5.5; Conducted Emissions (CE101, CE102) paragraph 5.7, 5.12 (limit curve #3), and 5.14, MIL-STD-464A Electrostatic Discharge, paragraph 5.7.3; FCC Class B, Part 15 Electronic Equipment Digital Device

**HIGH ALTITUDE ELECTROMAGNETIC PULSE (HEMP):** MIL-STD-461E, RS105; MIL-STD 2169B HEMP environment 1

**NEAR STRIKE LIGHTNING (NSL):** MIL-STD-810, Method MIL-STD-464A, Paragraph 5.4;

**ACOUSTIC NOISE:** MIL-STD-810F, 515.5; (Ambient noise generated does not exceed 60dBA, measured at 1 meter in front of the unit with a low ambient noise floor)

**EXPLOSIVE ATMOSPHERE:** MIL-STD-810F, Method 511.4, Procedure I