

# TETRA *notes*®

OPTIMIZED FOR THE REAL WORLD OF MILITARY  
AND INDUSTRIAL USERS

- Intel Core™ Duo LV 1.66 GHz Processor
- Biometric Fingerprint Reader \* + integrated Encryption
- 12.1" or 14.1" XGA (1024 x 768) display
- Touchscreen \* and sunlight readable display \*
- WiFi ; Bluetooth \* ; IrDA \* ; GSM/GPRS \* ; UMTS \*
- Swappable Media Bay (FDD / DVD / CD / HDD / Battery)
- Water proof keyboard (Backlight keyboard \*)
- Certified MIL-STD-810F & IP54 & MIL-STD-461E \*

\* Optional



Dust-Proof



3 Feet Drop



Water-Proof



Semi-Rugged   Rugged   **Fully-Rugged**



Reliable and efficient operation is provided by a high performance 12.1" or 14.1" TFT sunlight-readable LCD, a shock-mounted hard drive, and a wide range of ambient temperature features.

This extremely rugged model not only meets MIL-STD-810F and IP54 but also satisfies critical EMI requirements.

The TETRAnote S possesses extreme versatility and expandability, offering multi-bays for maximum flexibility and customized applications.

Users have the luxury of expanding the storage capacity by employing the bays with two additional removable hard drives, and adding two auxiliary batteries for extended use.

Complementing this rugged, multifunctional notebook is a state-of-the-art security package that includes a TPM 1.2 chip, a fingerprint biometric device, and a smart card reader. With multiple authentication capabilities, this reliable TETRAnote S dual core will reject any unauthorized access and safely protect confidential information.



# TETRA *notes*

## ■ Specifications

PROCESSOR	Intel® Core™ Duo L2400 1.67 GHz ; 667 MHz FSB
CACHE	2 MB L2
CHIPSET	Intel 945 GM / ICH7-M
RAM MEMORY	512 MB to 2 GB DDR2 RAM
VGA CONTROLLER	Integrated in Intel 945GM chipset ; 128MB shared RAM
HDD	Removable & Swappable 80 GB up to 250 GB SATA shocks-mounted

Optional : HDD heater for low temperature -20°C  
SATA HDD 80GB or above  
1GB/4GB Flash HDD

KEYBOARD	Water proof keyboard
POINTING DEVICE	Optional : Waterproof backlight rubber keyboard Touchpad capacitance type

AUDIO	Optional : Glove Used Touch Pad; touch screen Azalia 32bits - speakers 2W x2
SECURITY	TPM 1.2 : Trust Platform Module ( Bios, HDD, OS, session); Kensington Lock Optional : Integrated Fingerprint reader

## ■ Interface

PCMCIA	Type II x2 or Type III x1
--------	---------------------------

### MEDIA BAY

#### BAY 1

Optional : Combo DVD ; Dual DVD  
2<sup>nd</sup> removable HDD  
2<sup>nd</sup> removable battery

#### BAY 2 module & Functions

Optional : 2<sup>nd</sup> removable PCMCIA Type II x2 or Type III x1  
RS232 x2 or RS422 x2 Module  
Smart card reader, FDD  
Bluetooth v2.0 class 1, GPS  
3<sup>rd</sup> removable Battery

I/O ports	Serial Port x 1 ; RJ-11 x 1 ; RJ-45 x 1 ; USB 2.0 x 2 External VGA x 1 ; Microphone x 1 ; Line out x 1 IEEE 1394B x 1 ; IrDA x 1 ; Parallel port x 1 Docking port x 1 ; DC in x 1
-----------	--

## ■ Power supply

AC input - 90 Watts, Input 100-240v, 50/60Hz AC,  
10400 mAH Li-Ion battery (

Optional : Low temperature battery -20°C  
5200 mAH pack Battery  
Vehicle Adapter ( 90Watts, 12 - 32 V )

## ■ Communication

Ethernet 10/100/1000 base-T ; Modem 56 Kbps

Optional: Intel PRO/Wireless 3945 a/b/g,  
Wireless 3G+(GSM/GPRS/EDGE/UMTS/HSDPA)  
Bluetooth v2.0 + EDR class 2,

## ■ Operating system

Windows XP pro/ Vista

## ■ Display

12,1" or 14,1" TFT XGA (1024 x 768)

Optional: Sunlight Readable  
Touch screen (12.1" only)

## ■ Environmental

Certified MIL-STD-810F / IEC 529, NEMA and IP54

Optional: MIL-STD-461E

## ■ Dimensions

12,1" : 320 mm 13" W x 95 mm 3.8" H x 256 mm 10.1" D  
Weight : 5.8 Kg (12.6 lbs)  
14,1" : 320 mm 13" W x 95 mm 3.8" H x 280 mm 11.1" D  
Weight : 5.9 Kg (13 lbs)

## EXPANSION CHASSIS ISA/PCI



## ■ OPTIONAL EXPANSION CHASSIS

PCI Expansion Unit ( x 2 Slots)  
PCI-Express Expansion Unit ( x 2 Slots)  
ISA Expansion Unit ( x 2 Slots)  
---> Anti-shocks Mounted

## ■ OPTIONAL FACTORY OPTIONS

Factory option : HDD low temp. -20°C  
Intel PRO/Wireless 3945 a,b,g  
Fingerprint reader

## ■ OPTIONAL VEHICLE DOCKING STATION

I/O ports : 1x DC Input  
1x BNC Video Capture  
2x USB 2.0  
1x parallel Port EPP/ECP  
2x Serial Port  
1x VGA



## Environmental Specification

	Operating	Storage
Temperature	IEC 68-2-1,2,14 / MIL-STD-810F, Method 501.4, 502.4	
	0°C to 60°C -20° to +60°C (en option)	-40°C to +70°C
Humidity	IEC 68-2-30 / MIL-STD-810F, Method 507.4	
	5% to 95% RH, non-condensing	
Altitude	IEC 68-2-13/ MIL-STD-810F, Method 500.4	
	4 500 m	12 000 m
	Altitude change rate: 2,000ft/min	
Shock	IEC 68-2-27/ MIL-STD-810F, Method 516.5	
	15g, 11ms, 1/2 sinus	50g, 11ms, 1/2 sinus
Drop	IEC 68-2-32 / MIL-STD-810F, Method 516.5	
	1 m over concrete	
Vibration	IEC 68-2-6 / MIL-STD-810F, Method 514.5	
	10~55Hz/ 0.075mm ; 55~500Hz/1.0g	10~55Hz/0.15g ; 55~500Hz/2.0g
ESD	IEC1000-4-2	
Enclosure	tested & certified IP 54; MIL-STD-810F, Method 506.4 - 510.4; IEC 529, NEMA	
Explosive Environment	MIL-STD-810F, Method 511.4	
Regulation	FCC part 15, Subpart B, Class B, UL, CUL, TUV, CE, CCC, WHQL, E-mark, RoHS, WEEE	
	Option : MIL-STD-461E CE102: CS114, 115 & 116; RE102: RS103	

