GETAC A790
Rugged Notebook

Sales Kit

■ **Brief Introduction**

The GETAC A790 is the newest ultra-rugged model of the GETAC Rugged Notebook family, designed and built to survive the harshest environments. 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 A790 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 A790 will reject any unauthorized access and safely protect confidential information.

■ **Selling Points**

■ Multi-Bays

The obvious choice for a versatile, fully ruggedized laptop is the GETAC A790. Its unique multi-bay features enhance the user's expansion capabilities, which include a Media bay, an X - bay, and an expansion unit. The GETAC A790 offers abounding options, such as DVD combo and DVD Dual. Moreover, it possesses rich interfaces, for example, two RS232/422 ports, two to four PCMCIA slots, two PCI slots, two PCI-Express slots, a smart card reader and a fixed floppy drive. The storage capacity may be increased by adding one more hard drive and the battery life may be extended with two auxiliary batteries.

- ## Ultra Rugged

The GETAC A790 meets MIL-STD-810F and IP54 requirements. It is the most robust ultra-rugged portable notebook in the market. The fully magnesium alloy case and tough rubber corner bumpers allow the A790 to survive 3-foot drops on hardwood floors. Designed with high-end rugged technology, the A790 is able to withstand severe vibration and shock conditions which may cause electronic circuit damage and loose connections. Additionally, it is equipped with an "active protection function" that protects the hard drive from damages due to sudden drops. The fully sealed I/O caps and doors prevent solid particles and moisture from entering the unit and allows for continuous stable operation under extreme ambient temperature (-20   to 55   ) conditions.

- ## Wireless Communication

The GETAC A790 is an ultimate mobile wireless device in itself, offering various choices for different operating scenarios. For example, its short-range Bluetooth and IrDA can transmit data from the A790 to another device. A built-in 802.11a/b/g Wi-Fi is used to connect to Local Area Network, making it convenient for working away from the office. The Wide Area Network wireless options of the A790 are third generation mobile network devices, which include UMTS/HSDPA of Global System for Mobile Communications and CDMA2000 1x EV-DO for CDMA carriers as options. GPS is another available alternative. This machine is, without a doubt, the top preference for mobile solutions.

- ## Trust Platform Module (TPM)

The GETAC A790 is not only MIL-STD tough structurally, it also possesses amazing defensive capabilities. It is an embedded hardware-based security notebook with a Trust Platform Module (TPM). The basic core of TPM is Root-of-Trust, which is a chain of trust procedures. From pre-boot to OS load, this micro-chip monitors every step to guard against unauthorized tampering from physical theft or software attack. TPM provides numerous powerful functionalities for storage security, authority justification, and integrity measurement.
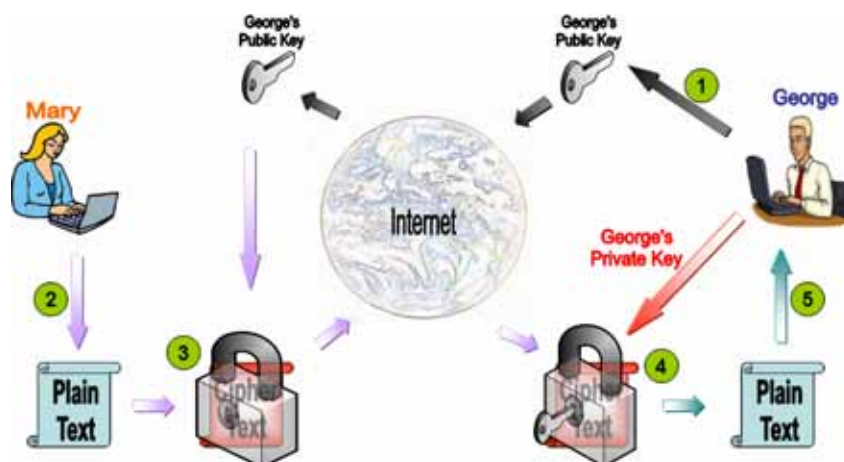
■ Biometric Fingerprint Reader

The GETAC A790 may be equipped with an optional biometric authentication device that ensures a secure log-in process or access to sensitive information. Merely swiping your unique fingerprint on the scanner when a password or username is required eliminates the need to remember passwords. The GETAC A790 is a rugged notebook that possesses the highest level of security protection in the world. Employing TPM with fingerprint recognition provide two walls of protection for a much higher level of authentication security.
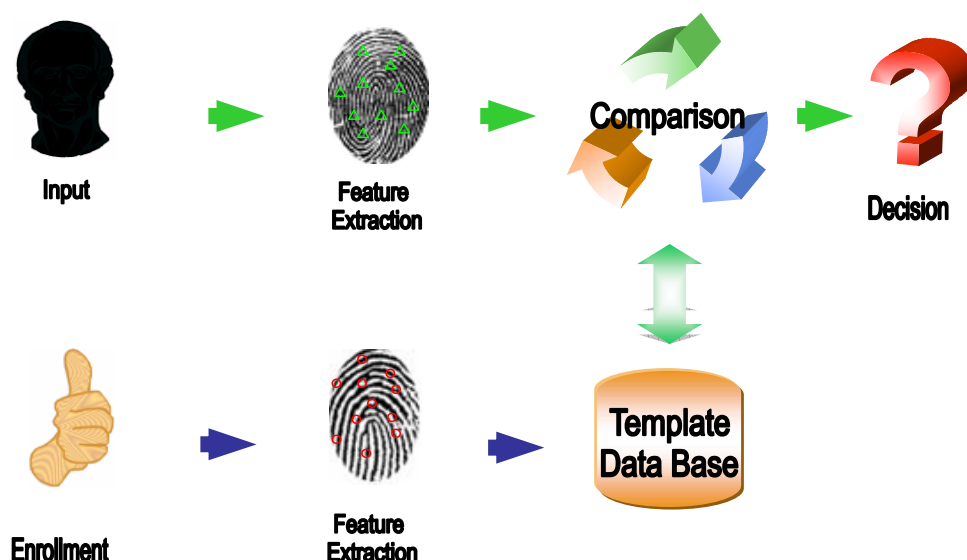
■ Sunlight-Readable Panel

The A790 provides cutting-edge technology with its 12.1" or 14.1" high resolution Sunlight-Readable LCD, which is designed to operate under bright ambient lighting conditions. GETAC's Sunlight-Readable solution has made a breakthrough in intensifying the LCD's visibility, making it more readable and usable under extremely bright environments.

■ Vehicle Dock

GETAC developed a robust vehicle dock for the A790. The dock offers very secure, stable and reliable features for the A790 when installed in various vehicles. The dock's isolator counteracts against severe vibration and shock caused by erratic road conditions, keeping the A790 firmly seated on the vehicle dock even in violent crashes or emergency braking situations. The dock is equipped with a full range voltage (12–32V) power supply, making it suitable for installation in a wide range of mobile applications. I/O replication is also available.

■ Product Photos

■ Front/ Right Side View
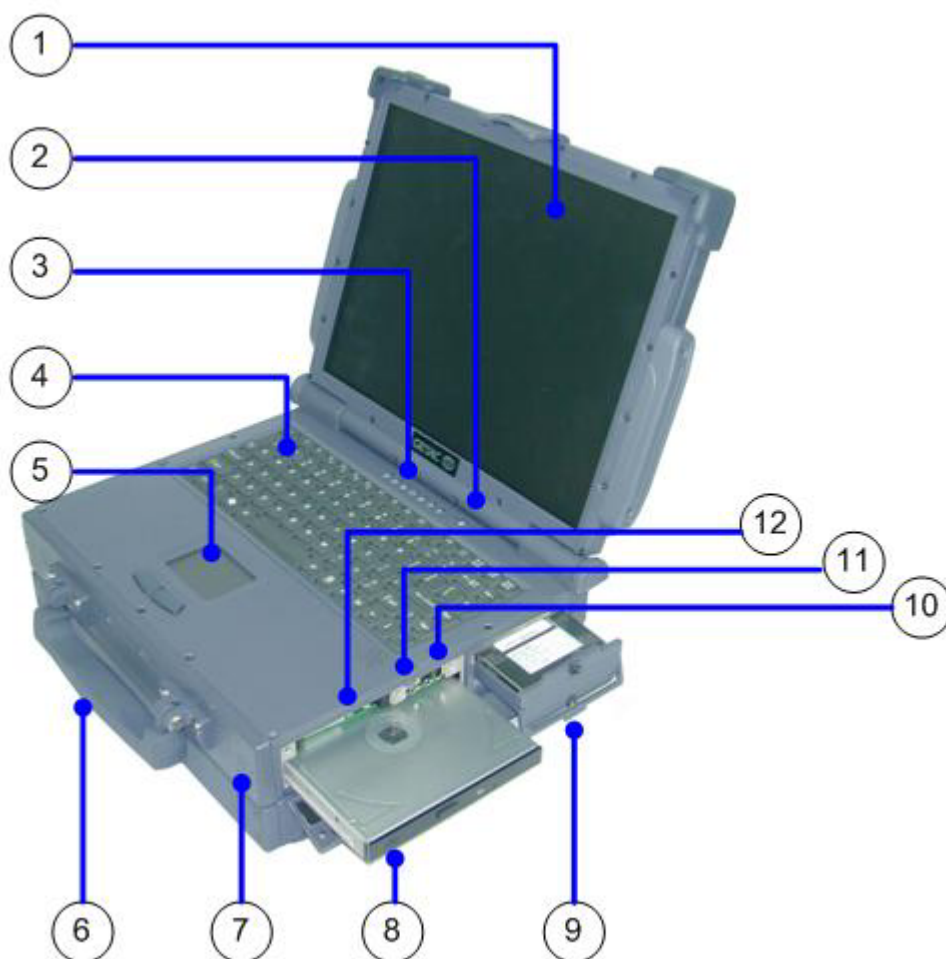
1	LCD	**5**	Touch pad	**9**	Shock mount Hard Drive
2	Power button	**6**	Handle	**10**	1394B
3	LED indicators	**7**	Speakers	**11**	Line out & Microphone
4	Keyboard	**8**	Media Bay	**12**	PCMCIA Slots

■ Back/ Left Side View
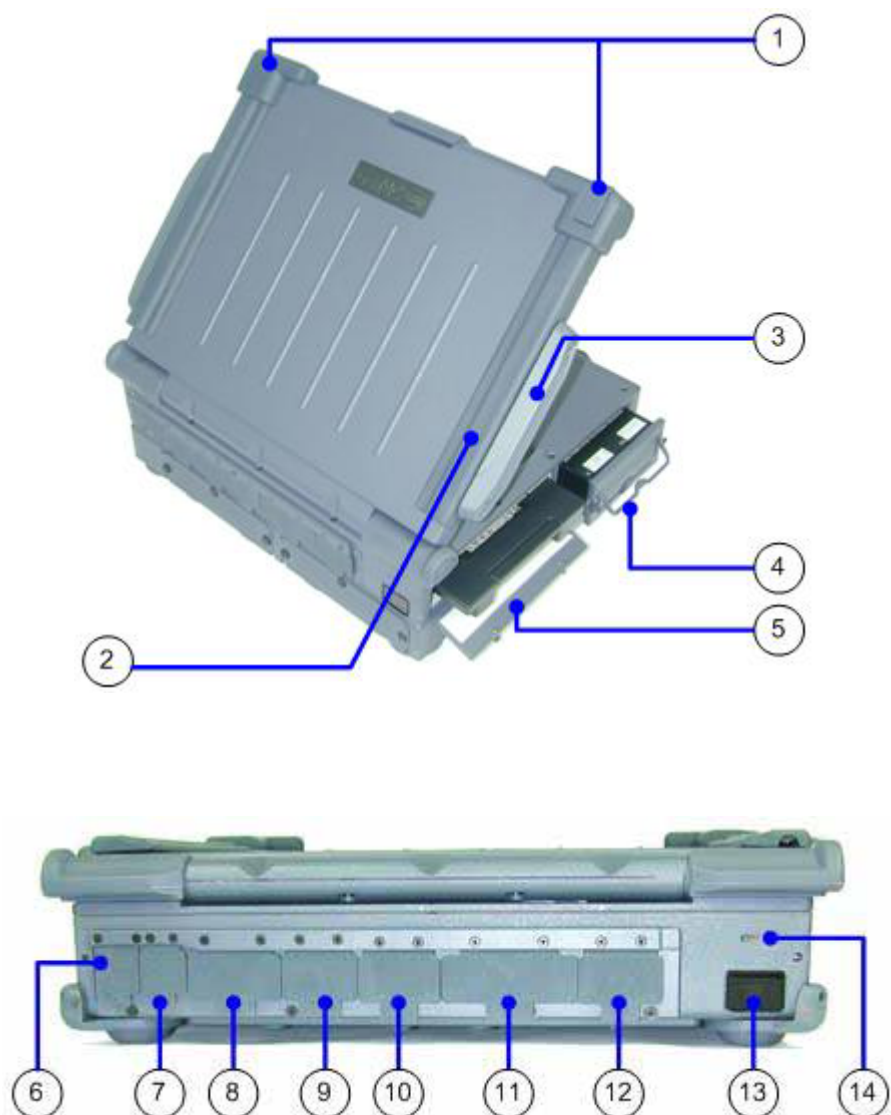
1	WLAN Antenna	**6**	DC in	**11**	Parallel port
2	Bluetooth Antenna	**7**	USB 2.0 x 2	**12**	Serial Port
3	3G Communication Antenna	**8**	Docking port	**13**	IrDA
4	Primary Battery	**9**	RJ-45 / RJ-11	**14**	Kensington Lock
5	X - Bay	**10**	External VGA		

Getac A790
Rugged Notebook

System Specifications

Model		A790	Remark
Processor	Intel® Core™ Duo LV Processor	1.66 GHz	Processor number L 2400
	FSB	667 MHz	
	2nd Level Cache	2M	
Chipset	Northbridge	Intel® 945GM	
	Southbridge	ICH7-M	
Memory	DDR2 (SO-DIMM x 2)	512MB	Max.: 2GB
VGA Controller		Intel® GMA 950 graphics controller	128MB shared RAM
Display	TFT LCD	12.1" or 14.1" XGA (1024 x 768)	Option: Sunlight Readable
			Option: Touch screen
Storage	IDE HDD	80GB or above	Option: SATA HDD 80GB or above
			Factory Option: Low temperature –20
Swappable Media Bay		Floppy Disk	
Keyboard		Water proof keyboard	Option: Backlight water proof keyboard
Touch pad		Capacitance Type	Option: Glove Used Touch Pad
PCMCIA		Type II x 2 or Type III x 1	
Audio		Azalia 32 bits audio digital controller	
		Speaker (2W x 2	
I/O Port		Serial Port x 1 | RJ-11 x 1	
		USB 2.0 x 2 | Microphone x 1	
		External VGA x 1 | Line out x 1	
		1394B x 1 | IrDA x 1	
		Parallel port x 1 | Docking port x 1	
		RJ-45 x 1 | DC in x 1	
Communication		10/100/1000 base-T Ethernet	
		56K ITU V.92 modem	
		Intel® PRO/Wireless 3945 a/b/g	Factory Option
Security		TPM 1.2	Factory Option
		Fingerprint	Factory Option
		Kensington lock	
Power Supply	AC Adaptor	90 Watts, Input 100-240v, 50/60Hz AC	
	Primary Battery	9600 mAH Li-Ion Smart battery	Option: Low temperature –20
Operating System		Windows XP One button recovery	
Physical	12.1" Dimension / Weight	13 x 11.1 x 3.8 (in) 12.6 (lbs)	with HDD/FDD/Primary Battery
	14.1" Dimension / Weight	13 x 10.1 x 3.8 (in) 13 (lbs)	

Accessory Options	
External Device Option	External USB Floppy
	3pcs Battery Charger
	Port Replicator
	ISA Exoansion Unit (x 2 Slots)
	PCI Expansion Unit (x 2 Slots)
	PCI-Express Expasion Unit (x 2 Slots)
Swappable Media Bay Option	DVD Combo
	DVD Dual
	2nd HDD (USB to IDE) 80/120 GB
Power Supply Option	4200mAH Media Bay Battery Pack / Option: Low Temperature –20
	4200mAH X-Bay Battery Pack
	Vehicle Adapter (90Watts, 12 - 32 V)
X Bay Option	RS232/422
	Ultra320 SCSI
	2nd PCMCIA (Type II x 2 or Type III x 1)
	2nd FDD
	Smart Card Reader
	Bluetooth (v2.0 class 2)
	GPS (with mouse type antenna)
	CDMA/CDMA2000 1x/CDMA2000 EV-DO
	GSM/GPRS/EDGE/UMTS/WCDMA/HSDPA
Mounting Option	Vehicle Dock
	Vehicle Mount
	Shock Mount
	Ultra Shock Mount
Carrying Bag Option	Carrying Bag

A-series Vehicle Dock Specifications

I/O port	DC Input	x 1
	BNC Video Capture	x 1
	USB 2.0	x 2
	Parallel EPP/ECP Port	x 1
	Serial Port	x 2
	VGA Monitor	x 1
Temperature	Operating:	-20° to 55°C
	Non-Operating:	-40° to 70°C
Humidity	5% ~ 95% RH, non-condensing	
Altitude	Operating:	15,000ft
	Non-Operating:	40,000ft
	Altitude Change Rate:	2,000 ft/min
Shock	Operating:	15g, 11ms, half sine wave
	Non-Operating:	50g, 11ms, half sine wave
Vibration	Operating:	10~55Hz/0.075, 55~500Hz/1.0g
	Non-Operating:	10~55Hz/0.150, 55~500Hz/2.0g
Crash Test	64 km/hr (~40 mph) or Higher Vehicle Speed	
Dimension	13.2 x 12.3 x 8.6 (in)	
Weight	24.5 (lbs)	
Accessories	12-32V 90W Vehicle Adapter	
	Lock Key x 2	
Features	Auto Power on with Ignition	
	90W Car Adapter Capable of Charging Battery	
	Power on Indicators	

Environmental Test Specifications

Item	Test Criteria		
Temperature	According to IEC 68-2-1,2,14 / MIL-STD-810F, Method 501.4, 502.4		
	Operating:	0° to 55°C	
		-20° to 55°C (low temperature option)	
	Non-operating:	-40° to 70°C	
Humidity	According to IEC 68-2-30 / MIL-STD-810F, Method 507		
	45% to 95% RH, non-condensing		
Altitude	According to IEC 68-2-13/ MIL-STD-810F, Method 500.4		
	Operating:	15,000 ft	
	Non-operating:	40,000 ft	
	Altitude change rate:	2,000 ft/min	
Shock	According to IEC 68-2-27/ MIL-STD-810F, Method 516.5		
Drop	According to IEC 68-2-32 / MIL-STD-810F, Method 516.5		
Vibration	According to IEC 68-2-6 / MIL-STD-810F, Method 514.5		
ESD	According to IEC1000-4-2		
Enclosure	According to IEC 529, NEMA, MIL-STD-810F, Method 506.4, 510.4		
	IP 54 compliance		
Regulation	FCC,UL,CUL,DGT,CE,CB,CCC,WHQL,BSMI,e-Mark,ATEX		
Others	MIL-STD-461E(option)		