

#### **Shock and Vibration Resistant**

The NotePAC is an expandable, ultra-rugged, all-metal notebook computer designed for extreme environments.

It combines a sealed high-strength, cast-alloy case with special components and shock mounting to form a portable platform that can withstand a 15 G shock while operating and still survive. Slip out the removable DataPak<sup>TM</sup> hard drive and it will withstand 40 Gs while operating.

Additional vibration protection from Isoguard™ mounting technology lets the NotePAC operate continuously in 2 G random vibration environments such as found in rotary winged aircraft and off-road vehicles.

## Two Types of Expansion

For applications requiring add-in expansion, the standard NotePAC comes with two PCMCIA type II slots, useable as one type III slot. Also available is a GPS receiver that takes the place of the floppy drive.

For greater add-in capability, you can specify an OmniSlice™ module, expanding the NotePAC by either one ISA AT card or two PC104 modules.

# **TFT and Sunlight Readable Displays**

The NotePAC is available with two displays, a huge 12.1" 800 x 600 pixel active matrix SVGA color display, or for outdoor use, a crisp sunlight readable 640 x 480 TSTN VGA monochrome screen. This superior outdoor screen displays 256 grey shades with an outstanding contrast ratio in direct or diffused sunlight.

### **Internal and External Power**

The NotePAC accepts power from AC or DC sources. It accepts 110/220 VAC, 50/60 Hz and from 12 to 16 VDC. An optional converter extends the DC range to 28 VDC.

- Sealed/Rugged High-Strength Alloy Casing
- Impervious to Shock and Vibration 40Gs
- Splash and Drip Proof Runs in the Rain
- Sealed Envelope Requires No Fans or Filters
- OmniSlice Expansion Modules
- Add an ISA Card and/or CD-ROM
- Internal Battery Power up to 1.5 Hours
- Sunlight Readable Display for Outdoor Use



Dolch NotePAC All Weather Ruggedized Notebook

A standard internal 2.4 A/H battery is provided that powers the unit and any expansion cards. The standard unit will operate 1.5 to 2 hours on a fully charged pack. With a 10 watt (max) expansion card it will operate for about one hour. The battery can be swapped in the field for a fully charged pack to continue operation beyond normal single battery capacity.

#### **CPUs and Storage**

The standard NotePAC configuration includes a powerful Intel® 486 DX4-100 CPU with Pentium® 100 and 133 MHz processor options. Expand memory from the standard 4 MB up to 32 MB. Also, the NotePAC is Windows 95™ ready with a sealed waterproof integral pointing device and a sealed 86-key, waterproof keyboard.

Storage is provided by a standard removable 810 MB hard drive that can be upgraded to 1.2 GB. All drives are small-form-factor, 2.5" ruggedized units mounted in a DataPak<sup>TM</sup> shielded metal cartridge that slides into the side of the NotePAC. A standard 3.5" floppy drive is accessed from the opposite side.

NotePAC is the most rugged, compact and environmentally protected notebook computer available. It combines MIL-STD inspired packaging with flexible add-in expansion capability, and is designed to stay alive when other computers die.

### **TECHNICAL SPECIFICATIONS**

**PROCESSORS & MEMORY** 

**CPU Type** 80486DX4-100 MHz Pentium 100 MHz Pentium 133 MHz

4 MB Standard, 8, 16 and 32 MB Optional

HARD DISK DRIVE

2.5" 810 MB Standard, 1.2 GB Optional

FLOPPY DRIVE

3.5-inch, 1.44 MB

**OPTIONAL DRIVES** 

Multispeed CD-ROM

**PCMCIA SLOTS** 

Two Type II/One Type III

**DISPLAY SYSTEMS** 

Display Types

12.1" Active Matrix Color TFT, SVGA 800 x 600 9.5" Sunlight Readable TSTN, VGA 640 X 480

Video Controller

32-bit Local Bus Video Controller 1 MB Memory

External Display Support (with expansion bar) 640 x 480, 800 x 600, 1024 x 768 Simultaneous External Display at 800 x 600

**GENERAL** 

Software Compatibility MS-DOS®, Windows<sup>TM</sup> (all versions), Windows NTTM, OS/2®, and, SCO® UNIX®

Serial Interface Two RS-232 Ports

Parallel Ports

Bi-directional, Enhanced Parallel Port

Keyboard & Pointing Device AT Compatible, 86-key Key Switches

Industrial Silicon Rubber

Pointing Device

Sealed Waterproof, MicroModule

**ELECTRICAL** 

System Input

Input Voltage: 12 to 16 Volts DC

110/220 VAC, +/- 10% 47 to 63 Hz AutoSensing/Auto Switching

Main Battery

Internal Ni-MH - 12V, 2.4 A/H (~100 minute operation w/o OmniSlice)

**Power Consumption** Standard Unit: 20 W Max Unit with OmniSlice: 30 W Max Power Management Doze, Sleep, Suspend

Optional STATpack™ DC Power Pack 15 A/H Rechargable Battery Pack (yields up to 10 hours operation)

MECHANICAL

Construction

Machined Aluminum Alloy Casting Anti-corrosion Coating

Display Panel

180 (tilting panel, anti-blacklash hinges)

Dimensions (standard unit)

Height 3.0", 7.5 cm (display closed) Height 13.1", 33.3 cm (display open) Depth 10.4", 26.4 cm Width 13.4", 34.0 cm

Dimensions (with OmniSlice installed) Height 4.1", 10.5 cm (display closed) Height 14.5", 36.8 cm (display open) Depth 10.4", 26.4 cm Width 13.4", 34.0 cm

Weight

Standard System 14.3 Lb 6.5 Kg Unit with OmniSlice 16.9 Lb 7.7 Kg

**EXPANSION** 

**PCMCIA** 2 Type II/One Type III

OmniSlice

Standard Slice: 1 3/4 Length AT Card

2 PC 104 Cards 1 CD, 1 1/2 Length AT

**Expansion Bar** 

Provides the Following Interface Signals: Com 3 & 4 on Male DB9 Connectors Parallel Port on Female DB25 Connector Keyboard and Mouse on Female PS/2 Connectors External CRT on Male DB15 Connector SCSI on SCSI Female Connector

**ENVIRONMENTAL** 

**Enclosure Class** IEC 529 **NEMA** Operating NEMA 4 **IP66** Non-Operating IP66 NEMA 4

Temperature

0° to 50° C (32° to 122° F) Operating -20° to 50° C (-4° to 122° F) Ext. Operating (special order only) -40° to 70° C (-4° to 158° F) Non-Operating

Rain Resistance

MIL-STD-810E Method 506.3. Procedure I/II NEMA 4 Method 6.4.1

**Dust Resistance** 

NEMA 4 Method 6.5.1.1

Humidity

5%-95% (non-condensing) 5% Solution, 35° C, 48 Hr

Salt Fog

**German Operation** 

Haidgraben 1C D-85521 Ottobrunn Germany

FAX: (+49) 89.608.3856

**ENVIRONMENTAL** 

Shock IEC 68-2-27 Operating 15G 11ms 1/2 sine MIL-STD-810E

\* Non-Operating

Par. 516.4 Procedure I 50 G 11 ms 1/2 sine

Drop IEC 68-2-32

36", Free Height Drop to Floor Free Drop Transit Drop 48", 26 Drops in Case per MIL-STD-810E Par 516.4 Procedure IV

Bench Handling 4", 4 Unprotected Drops per

MIL-T-28800E Par. 3.7.5.3. and 4.5.5.4.3

IEC 68-2-6 Vibration Operating

10-55 Hz, 0.2 mm 55-500 Hz, 1.2 G 10-55 Hz 0.3 mm

Non-Operating 55-500 Hz, 2.0 G

Altitude

Operating

High Altitude 15,000 Ft 4615 Mtr (1 hour)

Low Altitude -1,000 Ft 308 Mtr

Non-Operating

40,000 Ft 12308 Mtr High Altitude

(2 hours)

-1500 Ft -462 Mtr Low Altitude

**ELECTROMAGNETIC COMPATIBILITY** 

FCC Part 15 Subpart B, Class B Radiation

Static Discharge IEC 801-2, Level 4 DIN VDE 0843-2

Contact Discharge 8 KV Air Discharge Contact/Air Discharge 15 KV 15/20 KV

**Voltage Tolerances DIN VDE 0161** 

Pulses IEC 801-5 Level 4

**DIN VDE 0843-5** 

Transient Bursts

IEC-801-4 Level 4 PS/Data/I-O Lines DIN VDE 0843-4

**EM Fields** IEC-801-3 Level 3

DIN VDE 0843-3

SAFETY/CONFORMANCE

CE Mark, UL, CSA, TÜV Approvals IEC 950

RELIABILITY/MAINTAINABILITY **MTBF** 10,000 Hrs

MTTR 90 Minutes

Corporate Headquarters

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