

Andes 3

3" (80mm) Rugged, Portable Receipt/Label Printer for Multiple Applications



Extech Advantages:

- Prints receipts, tags or labels
- Lightweight
- Rugged: Injection molded ABS/PC blend with elastomer over-molds for extra protection
 - High impact resistance and high temperature strength
 - Chemical and UV resistance and flame retardant
 - Up to 6 ft (2 mtr) multiple drops to all corners and sides
- Clamshell design to fit larger paper roll
 - Holds paper roll with over 120 ft/40 meters in length
 - Transparent door inserts – see when paper roll is running low
 - Double locking paper door closure
 - Metal tear bar
- Interface and communications options galore
 - Serial and USB (Q2)
 - Wireless: IrDA, Bluetooth™ or 802.11b/g
 - MCR – 3 Track and/or Smart Card

Andes 3 Design Details

Power:

- Powered by high capacity Lithium-Ion battery cartridge (7.4V; 2200mAh)
- Battery charges internally to the printer or in external 2-bay battery charger
- AC Power charging adaptor for charging with battery in printer
- Direct vehicle battery input (10.8 to 30VDC)
- Vehicle docking station (available 2nd Quarter)
- Hardware and Software power management

Highly Integrated 32 Bit Arm 7 Microcontroller:

- Flash based Integrated CPU contains firmware, resident fonts, rotated fonts, downloadable fonts, graphics, multiple logos, and bar codes (Linear and 2-D)
- Internal and external memory - with 4MB Flash and 1MB SRAM memory under direct user control
- Manages all the features supported by the printer

Low Power Precision Regulator Circuits:

- 10 bit 4 channel A/D circuit to measure system and printer mechanism voltage levels, battery and thermal print head temperature
- Fail safe and CPU watchdog circuits

SEIKO Thermal Print Head

- Easy Load Clamshell style paper load system with slide button release for paper door
- Automatic thermal print contrast control
- High speed, high resolution print
- Built-in detectors to monitor voltage and paper-out

Easy to Integrate:

- Multiple Communication Interfaces including IrDA, Bluetooth™ and 802.11b/g
- MS-DOS and Windows compatible with full-speed handshake
- Print Drivers available for Windows 95, 98, 2000, XP
- Print Utilities available for most Mobile Operating Systems (including Windows CE, Pocket PC, .NET, .NET CF, WM5 and Palm)

Special Features:

- Page printing utility (Form Fiesta)
- Voltage boost circuit for speed and contrast management
- Various resident fonts to enable printing from 12 to 24 cpi
- In-field programmable for firmware, fonts and logo setup
- 2 Sensors in 3L version
- Allows for default parameters to be in-field customized
- Two-bay battery charger
- Multiple color LEDs for user feedback
- DMA and USB file system

“Make Mine an Extech!”

Print Mechanism

Printing Method: Direct Thermal
Print Resolution: 203 dpi/ 8 dots mm
Dots per Line: 832
Printing Width: 4.1" (104mm)
Paper Feed Pitch: 0.125mm
Printer Speed: Mechanism is rated at 3.35" per second (85mm/sec) @ 7.5V (actual print speed is application, temperature and communication dependent)

No. of Heat Elements: 1 heater/dot, 170 ohms/dot
Head Temp Detection: By thermistor with hardware protection against overheating
Paper-out/Q-Mark/(TOF) Detection:
By photo interrupter
Reliability: 100 million MCTF (mean characters until fail) @ 25% density

Operating Characteristics

Character set: ASCII International, PC Line Draw
Additional Character Sets:
Simplified/Traditional Chinese, Hebrew, Arabic, Polish, Korean, Vietnamese, Turkish
Opt. Character Sets: Downloadable fixed-width fonts
Graphic print: Supports 8-bit graphic printing, page printing, custom fonts and logo downloading

Bar Code Symbolologies:

Linear: Codes 39, Code128, UCC/EAN-128, Interleaved2 of 5, UPC-A, UPC-E, EAN/JAN-8, EAN/Jan-13, Codabar,

2 Dimensional: PDF417 (Q2)

Supervisory Commands:

Commands available to read battery voltage, buffer status, firmware and hardware version

Memory (Available to User):

SRAM: 64KB (internal to CPU reserved for system application)
1MB (external under user control)

Flash: 256KB + 16KB (internal to CPU reserved for system application and resident features)
4MB (external under user control)

Characters per Line: 36, 48, 57, 60, 64, 72, 96 (s/w command)

Print Contrast: Auto and user selectable

Print Character Attributes:

Double high, double wide, bold print, underline print, line spacing and reverse print

Communication

Interface:

Standard: RS232C (up to 115.2KB depending on computer capability)
USB (Q2)

IrDA (up to 115.2KB depending on computer capability)

Optional: Bluetooth™ v. 1.2 (optional)
WLAN 802.11b/g (optional)

Dip Switch Selectable

Baud Rate: 2400 – 115.2KB

Handshaking: Hardware (CTS/RTS) and/or Software (XON/XOFF)

Print Media:

Media Type: Direct Thermal Paper, Tag Stock and Label

Paper Width: 3.125" (80mm)

Max Roll Size: 130' @ OD: 2.2" (Standard receipt paper provided is Kansaki P390; other grades available)

Roll Core ID: 0.4"

(For optimum print quality and printer performance, use Extech supplied paper)

Power

Battery: Internal rechargeable 2 cell Lithium-Ion (7.4V; 2200 mAh)

Battery Life: 80% of original capacity after 300 cycles

Recharging: 3 hours@ fast rate charge (at empty)

External Charging Options:

DC Power Pack: 100-240V AC input, 10V/1.4 A DC output.

In-Vehicle Charger: 12V/24V Cigarette Lighter adaptor

Docking Station: Powered by 12/24VDC with spring touch pads to connect printer

Power ON/OFF: Power ON/OFF switch, or by raising RTS input; or sending a single character through serial input. Auto power down timer, can be set or disabled through user application.

Software

Extech Logo downloading utility
Extech Bluetooth™ configuration utility
Extech Form Fiesta page printing utility
Extech 802.11b/g configuration utility (Q2)

User Interface

Status indicators: 4 LEDs (3 are multi functioning) - Power/Communication Mode, Battery Status/Charging, MCR, Error

User Switches: 2 switches – On/Off, Feed

Communication Modes:

RJ type (6 pin) for Data I/O
Infra-Red (IrDA) with Ambient Light Filter
Bluetooth™ v 1.2 (optional)
WLAN 802.11b/g (optional)
Magnetic Card Reader (optional)
Smart Card Reader (optional)

Mechanical

Construction: Cylolac KJW Enclosure with elastomer over-molds

Dimensions: 4.75"W x 6.5"L x 3. 5"H (120W x 165L x 89H mm)

Weight:

Printer Only: 1.6 lbs (650g)

Printer w/ paper and battery: 2.2 lbs (967g)

Warranty:

Standard: One year standard

Optional: Up to 5 years available at extra charge

OEM Products: Design services available

Environmental Specifications

Operating Temp: 14° to 122°F (-10° to 50°C)

Storage Temp: -4° to 140°F (-20° to 60°C)

Charging Temp: 32° to 113°F (0° to 50°C)

Humidity: 10 - 90% RH (non-condensing)

Drop: Exceeds industry standard for drop

Environmental and Safety Specifications:

FCC: Part 15 Subpart B, Class B

CE: EN60950

CE: EN55022 Class B;

CE: EN61000-3-2;

CE: EN61000-3-3;

CE: EN55024

AS/NZ: 3548 Class B

Complies with EMC Directive 89/336/EEC

and Low Voltage Directive 73/23/EEC

Conforms to ANSI/UL STD 60950

and Certified to CAN/CSA STD C22.2 No. 60950-00

CB Certified, No. 60950-00

GS Certified, #04US00384-1

ETL Listed, control # 3046813

IEC 68 certified

IP54 (with Environmental Case)

Ordering Information

The Andes 3 comes standard with IrDA, USB (Q2), battery, 1 roll of paper and a 1 year warranty

Printer:

793281I

Andes 3 with IrDA Interface
[] add "R" for Magnetic Card Reader (i.e. 793281IR)

[] add "S" for Smart Card Reader

[] add "RS" for MCR and Smart Card Reader

[] add "-1" for Bluetooth option (i.e. 793281R-1)

[] add "-2" for 802.11b/g

Accessories:

151133

12/24V In-Vehicle Adaptor (Battery in printer)

756998-2

Belt Loop System

757352

Shoulder Strap

157260

Universal Wall Mount Charging AC Adapter (US, UK, Euro and AUS plugs included)

757068

Spare paper, pkg. of 5 rolls

757068-CASE

Spare paper (case of 200 rolls)

7A100014

Spare battery (2200 mAh)

767400-1

Battery charger (2-Bay) 120VAC

767400-2

Battery charger (2-Bay) 220VAC

767400-4

Battery charger (2-Bay) 240VAC

5892RJD9

Coiled Cable (RJ to D9)

Specifications subject to change without notice.

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