



A direct thermal, Windows compatible, printer system for interactive kiosks

The ITK38 printer uses direct thermal imaging to print on wide format (6.5" to 8.5") paper. It can print on rolls or fan-folded paper (fan-folded paper requires registration marks for position sensing). Designed specifically for kiosk applications the ITK38 has features and options structured to support unattended operation in a kiosk or similar environment. These features include: large paper supply, heavy-duty cutters, output isolation devices providing a range of functions from simple jam protection to complete document isolation during the print cycle, document present and hold or present and retract (dispose) of an untaken document, status information accessible over the interface.

A +24V power supply module supplies the power for the ITK38. The standard power supply is

60W. It is completely adequate for most applications, however, for applications that require large dark areas to be printed at the highest print speed (2 ips) a 130W power supply is available as an optional choice. The printer has a built in power management system which budgets the printer's operation to a modest 60W average power allocation or alternatively, if selected, to 130W.

The ITK38 operates under the Windows operating system using a supplied WYSIWYG driver. Combined with a raster organized printer controller this flexible driver produces simple direct printed output at 300 dpi resolution, from any Windows application or language.

Modular printer system simplifies kiosk integration

The printer and control electronics are integrated into a self-contained printer module. A paper roll module is typically attached to the printer module

but can mounted externally thereby significantly reducing the printer module footprint. Finally a separate power supply module is connected to the printer through a 6 foot DC power cable. This modular packaging is extremely flexible making it easy to integrate the ITK38 printer system into any kiosk.

Designed for use in kiosk applications where fast wide format printing is required.

Applications include: airline boarding passes, department store gift registry, financial statements, government forms, car rental agreements, information documents, etc.

The paper width can be factory set at 6.5 inches to 8.5 inches including the A4 standard. This adjustable paper width will accommodate many form sizes thereby extending the list of possible applications.



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Supports multiple paper output configurations

Cutter with transport presenter

This option is the best selection for unattended remote document delivery applications. It can operate in retract or non-retracting mode. The non-retracting mode is the default mode. This paper delivery option provides maximum isolation of the user from the print and cut cycles. It can store any reasonable size document in its loop storage chamber thereby preventing user access and disturbance of the document while printing and cutting. It also has a unique slip paper drive system, which protects against the document jamming if the output slot is temporarily blocked.

Cutter with jam resistant output chamber

Models without a transport-presenter can use a forward anti-jam protection chamber. As the document is being delivered, if the output is inadvertently blocked, a controlled buckling of the paper, into this iam chamber, occurs, A sensor detects this paper buckling and printing is temporarily halted to prevent the occurrence of a wrinkled paper jam. After a delay, the printing is resumed expecting that the blockage was temporary. If the blockage is clear the printing is

completed. If after several unsuccessful attempts, the printer will stop and report this error. This level of protection is adequate for many applications; however, it is not as robust as a transport-presenter.

Cutter only output

With this option the printer system does not isolate the user from the document during the print and cut cycle. The responsibility for document isolation is passed to the kiosk designer who could provide document isolation by providing a well in the kiosk enclosure into which a document could drop.

Tearbar with jam resistant output chamber

A tearbar paper separation option is available for the ITK 38. This option provides a user tear off edge, in place of a paper cutter, to accomplish paper separation. Using perforated paper stock is recommended when the tearbar option is selected. Typically this option is only used when trained staff uses the printer. This might be at a customer service counter where the attendant, not the end user, uses the printer. The tearbar output option





does not usually provide enough user isolation to be deployed for direct end user document delivery.

Specifications All specifications subject to change without notice.

Printing Method: Raster, direct thermal. The printed image is created using Windows¹ WYSIWYG Printer Driver (PA

supplied printer driver required.) 2.00 IPS Max.

Print Speed: Print Width: 8". (203 mm) Max. Printhead:

Dot Density 300 DPI (11.81 dots/mm) 3.33×10^{-3} in. (0.0847 mm) Dot Size

Paper Width:

8 5" to 6 5" Standard Width: 8.5" +0/-0.040" (216 mm + 0/-1 mm)8.3" (210mm) Other Widths: <8.5" special factory order Caliper: 0.003" (+0.0007" / -0.0008")

Feed: Friction driver roller 3.25" Min. User defined Max. Document Length:

Detectors: Paper/Registration (Optical) Printhead Temperature (Thermistor)

> Printhead Lever Detect (Mech. Switch) Paper Jam Detection (Optical) Document Not Taken (Optical) (T-P Only)

User Switches: Power On/Off, Select (F0), Test (F1), Line Feed (F2), Form Feed (F3)

Power/Paper (LED) Indicators: Ready (LED)

Attention/Error (LED) Sequential Tones (Beeper)

System Parameters: A user friendly switch panel entry of

setup data into EEPROM memory. (Print intensity, control settings, etc.)

Printer Status Data: Includes all printer operational parameters: Low Paper, Out of paper, Jam. Ticket Not Taken, unique

64-Bit electronic serial number, etc.) Status is returned to host via the interface's reverse channel. Status information is critically important for unattended printer deployments.

Printhead: 30.0 x 10⁶ pulses/dot (Min.) 65.6 x 10³ ft (20 Km) abrasive (Min.) Cutter: 500 K (Typical), 300K (Min.)

Transport-Presenter: 450 K ft. (Typical); 270 K ft. (Min.) of delivered paper

Windows[™] compatible 300 MHz or faster PC with Pentium CPU and **System Requirements:**

ECP port with DMA (recommended) Windows™ 98, ME, NT 4.0, 2000,

Regulatory Compliance:

Printer Drivers:

Compliant

Safety: UL 1950, 3rd Edition CAN/CSA C22.2 No. 950-00

CENELEC EN 60950: 1992 FCC Part 15 Class A

EN 55024: 1998 EN 55022: 1998 Class A **CB Test Certificate:** Compliant IEC 60950 2nd Edition

Environment:

EMI/EMC:

Operating: +5°C to +40°C Temperature:

Storage: -5°C to +65°C

Humidity: 20-85% relative, non-condensing Interface:

IEEE-1284 Parallel Module using Parallel Compatibility Mode forward and Nibble Mode reverse channels.

Parallel Interface Cable: Standard IEEE-1284 A-B cable (DB25M/C36M)

USB Serial: USB Interface Module (2nd Qtr 03) USB Interface Cable: Standard USB A-B Cable (1.1 or 2.0 compliant)

USB Interface/Cable: USB via an add-on USB to IEEE-1284

adapter cable to convert printer's parallel interface to a USB. No additional USB cable required. (Windows 2000 or XP only)

Options: Motor Driven Cutter, Tearbar; disposing/Non-Disposing Transport-

Presenter; Detachable Internal or External Paper Roll Holders; Low paper detection sensing

+24 VDC (±5%) Model PS-60-14: 60 w or Model PS-130-14: 130 w Power Provided By:

Power Supply Options: AC Input Voltage:

85-264 VAC (60 w) 85-132 or 170-264 VAC (130 w)

Input Frequency: 47 to 63 Hz

1.5 A (rms) @ 115 VAC (60 w) 0.9 A (rms) @ 230 VAC (60 w) AC Input Current:

3.0A (rms) @ 115 VAC (130 w) 1.7 A (rms) @ 230 VAC (130 w)

DC Power: 60 or 130 Watts (average)

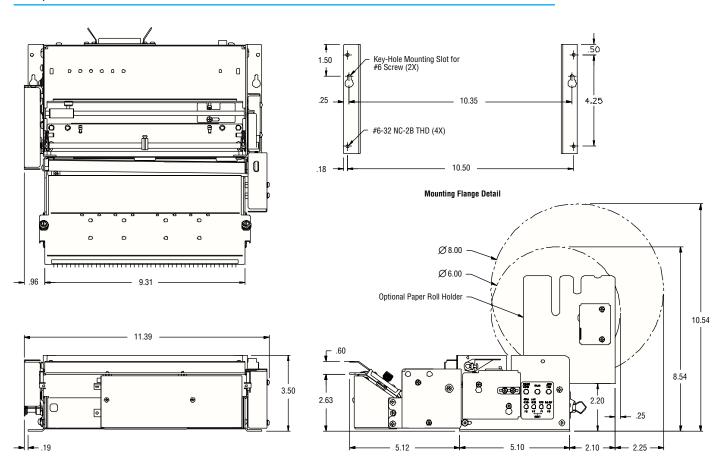
Weight:

Printer: 8.3 lbs.

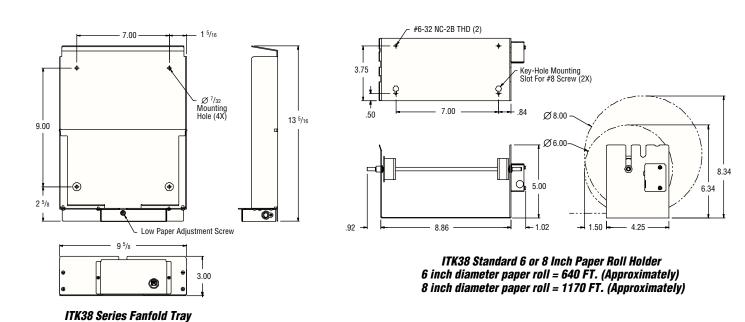
1.2 lbs. (60 Watt Model) 1.9 lbs. (130 Watt Model) Power Supply:



Outline dimensions for the ITK38 Series Printer with an integral paper roll holder and cutter with transport-presenter is shown below. Versions that include a tearbar or cutter with an output protection chamber are also available with minor dimensional changes. A 10-inch remote paper roll holder as well as an optional output extension are also available. Contact Practical Automation for detailed information.



ITK38 with Internal 6 or 8 Inch Paper Roll. Includes Cutter with Transport-Presenter





Ordering Information



Paper Output Options

- D = Cutter with Transport-
- C = Cutter with Output Protection Chamber
- K = Cutter Only Output (without Output Protection Chamber)
- T = Tearbar with Output Protection Chamber

Forms Control

- Blank = Continuous roll stock paper
 - R = Registration marked paper

Paper Input Options

- 00 = A rear paper guide, for an external paper supply, is included with this option; however, no paper roll holder is supplied. The paper roll holder or fanfold paper tray is ordered separately.
- 8L= Attached paper roll holder for 6/8" (152/203 mm) diameter paper rolls with low paper sensor & 18" (457 mm) interconnect cable
- 80 = Attached paper roll holder for 6/8" (152/203 mm) diameter paper rolls without low paper sensor.

Data Interface

- Parallel = IEEE-1284 Parallel Interface
- **USB Serial** USB = Interface.

Customization Number

- This entry is Blank = normally blank
 - Adapts printer for A4 width paper
- A4 =

ITK38 Power Supply



Model Number

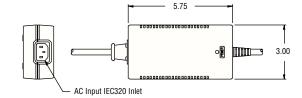
- 60 = Standard 60 Watt External Power Supply
- 130 = Optional 130 Watt External Power Supply

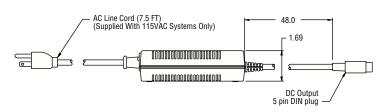
Line Cord Option

- Blank = Supplied with a US approved line cord
 - E = No line cord for export applications

The PS60-14 Power Supply

Used for standard printing applications.





ITK 38 Printer Model Number Example:

ITK38-D8L-Parallel with PS60-14

The above two model numbers, together, specify a complete ITK 38 printer configured with the following options:

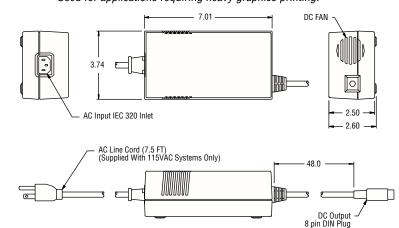
- ITK38 = ITK 38 Series 300 DPI, 8.5" (216mm) paper width printer
 - **D** = A cutter with transport-presenter is the paper output option
- (blank) = The forms control jumper is set to accept continuous form paper
 - **8L** = The input paper option is an attached 6"/8" diameter roll holder w/low paper sensor and
- Parallel = A parallel data interface

With:

PS60-14 = A 60 watt external desktop power supply with a line cord for the North American market

The P\$130-14 Power Supply

Used for applications requiring heavy graphics printing.





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