



TRANSTERM 8B PORTABLE 'BASIC' COMPUTER

THE TRANSTERM 8B 'BASIC' COMPUTER is a hand-held battery powered portable data collector suitable for a variety of applications including inventory tracking, work in process tracking, ordering taking, and remote data collection. The "TT8B" is built to withstand harsh environments and handling. The keypad is unaffected by most chemicals and solvents and the large keys are easy to press even with gloved fingers. The 32 character display is suitable for prompts and instructions as well as operator entered data and the optional barcode scanner allows for quick and accurate data collection. 'BASIC' Programs and data files can be created, edited, debugged, uploaded and downloaded using menu driven PC software (via a RS-232 port either directly connected or remotely connected through an external modem).

THE BASIC INTERPRETER The "TT8B" has an internal interpreter that recognizes an abbreviated version of the BASIC language (TTBASIC). TTBASIC supports a set of functions and statements for memory initialization, program control, and input/output of data. Each program statement has a preceding integer line number. The statements are stored in ascending order in the program memory. TTBASIC statements can PROMPT the operator to enter data, recognize alpha numeric data from the keypad or optional barcode scanner, validate the input and review and/or edit the data in memory. BASIC routines can PRINT to the serial port or display, INPUT from the serial port, keypad or barcode reader, manipulate Integers, real numbers and string variables. Several Math functions are supported, and even the tone and duration of the beeper can be altered. The Interpreter operates in 3 modes:

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| 1. DIRECT mode | - Executes a TTBASIC statement immediately. |
| 2. RUN mode | - Executes a TTBASIC program downloaded to the TransTerm. |
| 3. TERMINAL mode | - Emulates a dumb terminal. |

A TTBASIC DEVELOPERS KIT is available for the IBM PC/AT or compatible computers. Programs can be written, debugged, uploaded and downloaded from the PC (over COM1 or COM2). The kit includes a cable and a diskette containing a Utility program, Programmer's Reference Manual, and sample TTBASIC programs and routines (with documentation).

THE DISPLAY

- o Twisted nematic liquid crystal technology with 2 lines x 16 character positions.
- o Each character position is a 5x7 dot matrix, 0.179" high x 0.124" wide (4.55mm x 3.15mm).
- o 96 ASCII characters (uppercase, lowercase, numerics and specials characters) with a blinking box cursor symbol.

THE KEYBOARD

- o 32-key (4 col x 8 row) hermetically sealed membrane keypad with Key-click for audible feedback.
- o A WINDOWED polycarbonate overlay allows a printed key legend to be inserted between the keyboard and overlay to label the keys.
- o Keyswitch travel: 0.006" - 0.008", Typical with actuating force: 4-8 ounces (Rated life: 10,000,000 cycles per switch element).
- o The keypad supports 8 special characters, numerics (0-9) and Alphas (A-Z) (using the A/N key). Other keys perform the following functions:

STOP -	Stops a RUNNING program (RUN mode) and returns control to the keyboard (DIRECT mode).
RUN -	Executes a program in memory (RUN mode), if there is a program loaded.
SPACE -	Generates the ASCII space code (CHR(32)).
DELETE -	This key entry deletes the last character entered.
ENTER -	Generates the ASCII carriage return (CHR(13)) and terminates a statement line or string input.
A/N -	Toggles from Numeric to Alpha key entry.

THE MEMORY

- o 128K bytes (up to 1152k optional) used for both program and data storage.
- o TTBASIC programs can be stored in RAM memory or optionally stored in EPROM memory.
- o The maximum program size is 64K. Multiple programs can be CHAINED to on the RAM disk.
- o The RAM memory can store multiple Data arrays and Data files for validation and data collection.
- o The maximum number of files is 254, the maximum file length is 64K, and the maximum number of records per file is 64K.
- o The RAM memory is maintained by a 3V lithium battery when the unit is turned off (3 to 5 year battery life).

THE SERIAL PORT

- o EIA RS-232C compatible with Serial asynchronous full duplex ASCII coding
- o The TransTerm recognizes both hardware and software handshaking (XON/XOFF) and has a 32-byte input buffer.
- o Data format: 1 start bit, 7 or 8 data bits, Optional parity (even, odd, mark, space or none) and 1 stop bit.

- o The TransTerm supports eight baud rates: 110, 150, 300, 1200, 2400, 4800, 9600, 19.2K
- o The RS-232 connection uses a DB-9M connector with the following signals;

Pin	Signal	Description	I/O	Notes
1	DCD	Data Carrier Detect	-	Not Used
2	RD	Receive data	Input	RS-232 Communication signal
3	TD	Transmit data	Output	RS-232 Communication signal
4	DTR	Data Terminal Ready Output	-	High whenever the unit is ON
5	GND	Ground	-	Signal and Frame ground
6	DSR	Data Set Ready	-	Can be used to power the unit (12 VDC)
7	RTS	Request To Send	Output	Hardware handshaking
8	CTS	Clear To Send	Input	Hardware handshaking
9	RI	Ring Indicator	-	Can be used to turn the unit ON remotely

OPTIONS

- o The BARCODE interface is a Hewlett Packard wand interface (5 pin DIN) to connect a wand/pen, handheld laser, CCD scanner or barcode card reader. Nine different symbologies are supported: Code 39, Extended Code 39, UPC, EAN/JAN, Code 128, Codabar and Interleave 2 of 5.
- o The TOUCH MEMORY interface reads Touch-key ID tags in place of the barcode reader. These small metal micro-cans provide a more durable alternative to bar coded badges (micro-cans are typically attached to a key chain).
- o The DISPLAY BACKLIGHT option illuminates the display for viewing the TransTerm in the dark.
- o CUSTOM OVERLAYS can be provided for high volume re-sellers with special needs (OEM applications).
- o The PROTECTIVE CARRYING CASE has a loop to hang the unit from a belt and a holster for the barcode wand.

CASE

- o Two piece injection molded ABS.

POWER

- o The TT8B is powered by four AA size Ni-Cad batteries and comes with a battery charger. The battery charger connects to a standard 110VAC outlet, and it's cable plugs into the side of the unit. The TT8B can operate with the charger plugged in for extended periods of time.
- o Power consumption: 30 milliamps @ 4.8 Volts (typical). Battery life is 10 to 20 hours on a full charge (varies with options, battery age, etc).
- o The TransTerm can be optionally powered over the serial connector (6 to 12 VDC on pin #6).

ENVIRONMENT

- o Operating Temperature:
0 to 50 degrees C (32 to 120 F),
Humidity: 5 to 95% non-condensing
- o Storage Temperature:
-20 to 70 degrees C (-4 to 158 F),
Humidity: 0 to 100%

SIZE & WEIGHT (options will effect weight)

- o Enclosure:
Height: 7.50" (19.05 cm),
Width: 4.0" (10.16 cm),
Depth: 1.29" (3.27 cm),
Weight: 0.86 lbs (535 grams)



Optional case for TT8B