

# The Perfect Portable Computer.

The Teleram 3000 is the portable computer in a class all its own. Less than 9 lbs. and compact enough to fit easily into a standard briefcase, yet a full-function computer with a full-size keyboard. With up to 256kbytes of nonvolatile bubble memory, it's all the power you need for virtually any application—in the field, while traveling or at a home. It also can be your most cost-effective option for an office system. Moved from desk to desk as needed, a Teleram 3000 can do the work of a desktop while being shared by several users.

The Teleram 3000 can be operated anywhere up to 10 hours from its internal, rechargeable battery, or from the included charger which is switch-selectable for U.S. or European voltages (115 VAC—230 VAC). The Teleram 3000 will also draw power from an

automobile cigarette lighter. The numerous other advantages of the Teleram 3000 include programmable keys allowing up to 51 functions, sophisticated communications software, a 4-line x 80-character flip-up scrolling display, a serial port and a teleCONNECT™\* expansion bus. Teleram also offers a wide range of peripherals including a Teleram 3620 portable floppy drive, a Teleram 3610 monitor interface, the Teleram 3500 Office Station, printers and acoustic couplers.

The Teleram 3000 is typically used for field audit survey, inventory control, sales management, electronic mail, order entry, word processing, scheduling, process control accounting and more—wherever portability is required.

## TELERAM 3000

#### HARDWARE

Computer

CPU: Z80-L

CPU clock: 2.5MHz

Memory

ROM: 4kbytes (contains power-on diagnostics, teleCONNECT™\* initialization, bootstrap loader) RAM: 64kbytes dynamic RAM, no wait states External: 16kbytes overlay memory via teleCONNECT

Mass Memory

Bubble Memory: 128kbytes, configured as disk "Drive A:"

expandable internally to 256kbytes

External: floppy, Winchester disk via teleCONNECT

Communications

Serial: one programmable RS232C, fully configurable Line Protocols: DTR/CTS, XON/XOFF, keyboard selectable

Block Protocols: CRC-16 using teleTALK™\*

Keyboard

Number: 83 stations

Programmable: 16 function keys (each 2-level programmable) 12-key numeric keypad (7 keys 2-level programmable, 5 keys 1-level programmable)

Display

Physical: 4-line x 80-character liquid crystal display Logical: physical display acts as four-line scrolling window on a TeleVideo TVI-920C 24-line x 80-character display External: 24-line x 80 character CRT via teleCONNECT

Power Requirements

Battery Operation: typical operation 5 hours between

charges

AC Operation: 110/220VAC 50/60Hz use while recharging DC Operation: 12VDC @ <1A use while recharging Power Dissipation: 3 watts average, 9 watts peak

### SOFTWARE

Operating System
Standard: CP/M®\*\* Version 2.2 Optional: UCSD p-System™\*\*\*

System Utilities

teleTALK: telecommunications utility which allows error-free

file transfer via RS232C port

KEYDEF: function key definition utility which can allocate function keys differently for each applications program as

well as for CP/M

DEFAULT: allows modification of keyboard (repeat rate and repeat delay), communications (baud rate, word length, stop bits, parity, and protocol), and IOBYTE parameters, saving them in non-volatile bubble memory ASSIGN: a versatile I/O redirection utility, allowing user modification of an automatically compiled device table (see expansion section), saving parameters in non-volatile bubble memory

FORMAT: a disk formatting utility which allows use of disks formatted in Osborne single-density, IBM PC CP/M-86 double density (both single- and double-sided) RECOVER: performs a SYSGEN on the 3000's bubble

memory, for updating/modifying BIOS

Miscellaneous

Applications: fully compatible with CP/M 2.2 word processing, spreadsheet, database and other applications Languages: fully compatible with CP/M 2.2 Pascal, BASIC, Fortran, Cobol, Z80 assembler and other languages

#### GENERAL

**Physical Dimensions** 

Size: 13"W x 9.75"D x 3.5"H

Weight: 8.75 pounds

Environment

Operating Temperature: 40 deg. F to 130 deg. F

(10C to 55C)

Operating Humidity: 5% to 95% non-condensing Storage Temperature: -5 deg. F to 140 deg. F

(-20C to 60C)

Reliability

Operating Vibration: 0-55 Hz 0.010" sinusoidal-all

3 axes

Non-Operating Shock: 15g for 20 msec-all 3 axes

Mean-Time-Between-Failure: 2,800 hours

Mean-Time-to-Repair: 30 minutes

EMI: certified for FCC Class B (Home Use) conforms to

VDE Specification 0871 Class B

#### **EXPANSION**

#### Interface

teleCONNECT™: a proprietary 2.5MHz CPU bus which allows peripherals to be easily attached to 3000, and which supports the 3000's device table and I/O redirection scheme

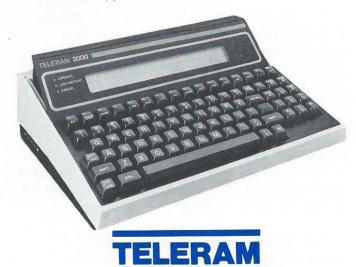
Desktop Peripherals

Model 3500 Office Station: expansion chassis with six card slots, allows desktop use of 3000 with peripherals such as floppy disks, Winchester disks, CRT monitors, printers, modems, etc

Transportable Peripherals

Model 3610 CRT Interface: a standalone monitor interface, capable of interfacing the 3000 to any standard 24-line x 80-character RS-170 CRT monitor

Model 3620 Floppy Disk Drive: a standalone floppy drive, including controller electronics, power supply, and charger for the 3000. Facilitates data movement and program installation, supports four disk formats.



## **Teleram Communications Corporation**

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