



CE5320X HANDHELD DATA COLLECTOR



Neptune's newest handheld computer — the CE5320X — complete with Microsoft® Windows® CE.NET operating system, ushers in a new era in handheld data collectors. The CE5320X is powered by Neptune's meter reading software, either FieldNet® or Equinox™ by DB Microware. Neptune's meter reading software is designed to automate the meter reading process with a comprehensive feature set that assists utilities to reliably manage meter reading schedules regardless of size or industry type.

With Neptune's ARB® Utility Management Systems™, utilities can read their meters using a variety of data collection technologies – walk-by, mobile and targeted fixed network. The CE5320X is just one component of Neptune's hybrid meter reading approach allowing the meter reader to collect meter readings manually (keyed entry), probed, or via RF. Regardless of the method, the CE5320X offers the capability to reliably collect and store meter readings throughout the entire work day.

The CE5320X handheld is loaded with meter reading routes through an Ethernet communication/charging cradle using Neptune's meter reading software. Communication/charging cradles are connected directly to a PC, to a server supporting multiple computers, or to the company LAN. To retrieve meter reading data, the CE5320X is again inserted into the cradle at the office. Data is then downloaded to the meter reading software and prepared for transfer to the billing system. The CE5320X remains in the cradle to recharge so it is ready for work the next day.

Utilities also have a choice with respect to RF AMR capabilities. The CE5320X can be equipped with either an HR2380 receiver designed to automatically read Neptune R900® radio transmitters or an HR2580 receiver designed to read R900, Itron® R300 and electric ERT® transmitters.

Additionally, the CE5320X supports various types of meter probes. In the water industry, walk-by probed meter reading is supported via a wireless RF link between the probe and the handheld computer. In the electric industry the CE5320X supports optical probing across a wide variety of electric meters and file types for time-of-use and mass memory meters.



KEY FEATURES

- AMR capable – fully compatible with R900s, R300s and electric ERTs
- Windows CE.net operating system
- 54 multi-functional raised tactile keys
- Color touch-screen display
- Designed for extreme durability – complies with IP67 & MIL-STD-810F
- Replaceable long-life lithium ion battery – intelligent fast charge system

KEY BENEFITS

- Offers true multi-tasking capability
- Provides maximum field performance
- Multi-utility meter reading capability
- Flexible, easy-to-use software application functionality
- Migrates from multiple data collection methods – manual keyed entry, probed, and walk-by RF
- Supports rich contrasts that are easy to read both indoors and outdoors
- Courteous, prompt, and conscientious Support Specialists available if needed

Operating System	Windows CE.NET 4.2
Software Application	FieldNet or Equinox
Processor	400 MHz Intel Xscale PAX255
Memory	64 MB RAM, 128 MB Flash for WIN CE and file system
Display	3.5" (89 mm) QVGA TFT touchscreen transreflective color LCD with backlighting 320 x 240 pixels with full graphics
Keyboard	Highly ergonomic keyboard, 54 multi-function keys Ergonomic key grouping to facilitate data entry Alphanumeric keys with large, separate numeric keypad Tactile and programmable audible feedback Customized keyboard templates to support FieldNet and Equinox-MR Optional 2-zone keyboard backlighting
Power Supply	Rechargeable Lithium-Ion battery pack (user accessible) 2200 mAh Intelligent fast charge system (4 hours) Power management system Integrated charge status and low battery indicator Typical 10-12 hour work day Rechargeable Nickel metal hydride backup battery ON/OFF switch, manual and automatic shutoff 5 Volt power for external devices
Communications	Ethernet 10 Base T, 10 Mbps IrDA 1 RS232 on Lemo connector, up to 230 kbps full duplex
Audio	Speaker output
AMR RF Receiver	HR2380 RF Receiver (R900 only) HR2580 RF Receiver (R900, Itron R300, Itron electric ERT)
Dimensions	Without AMR RF Receiver Height: 1.53" min., 2.36" max (39 mm min., 60 mm max.) Width: 3.53" min., 4.08" max (90 mm min., 104 mm max.) Length: 9.74" (248 mm) With AMR RF Receiver Height: 1.53" min., 3.25" max (39 mm min., 83 mm max.) Width: 3.53" min., 4.6" max (90 mm min., 117 mm max.) Length: 11.75" (298 mm)
Weight	Without AMR RF Receiver 1.94 lbs (880 g) with battery pack With AMR RF Receiver 2.4 lbs (1,089 g) with battery pack
Temperature Range	Operating: -4°F to +122°F (-20°C to +50°C) Storage: -22°F to +140°F (-30°C to +60°C) Humidity: 95% non-condensing
Environmental	MIL-STD-810F method 512.4 procedure I IP67 (1 meter immersion) MIL-STD-810F method 506.3 procedure I (wind blown rain) Shock resistance: * Exceeds 2 meter drop on concrete * MIL-STD-810F method 516.5 procedure IV Electrostatic discharge: * Meets EN61000-4-2
Approvals	FCC Class B CE Certification ISO9001
Accessories	Ethernet communications and charging cradle 110 V AC power supply Ergonomic hand strap adjustable for either left- or right-handed users Shoulder carrying strap
Warranty	1 year comprehensive warranty Hardware and software maintenance contracts available

The CE5320X incorporates an Intel® XScale™ 400MHz processor to maximize field performance. 64Mb of RAM and 128Mb of internal Flash memory provide ample storage for multiple routes of meter reading data. Communication of data from the CE5320X is conducted through an Ethernet cradle at speeds up to 10Mbps — almost 100 times faster than conventional serial communications. The cradle also serves as a charging device designed to intelligently “fast charge” the unit’s rechargeable lithium-ion batteries in only four hours. The CE5320X power supply is designed to provide a minimum 10 hours of continuous use which minimizes downtime and ensures a full, productive work day.

Neptune’s commitment to quality and long term service is backed by a qualified Systems Support Center. Neptune’s System Support team is easily accessible through our toll-free number (1.800.647.4832). Neptune provides access to qualified professionals who provide prompt and courteous assistance. Comprehensive hardware and software warranties as well as maintenance services are also available to keep all equipment operating at peak performance.

CE5320X with charging cradle



Neptune engages in ongoing research and development to improve and enhance its products. Therefore, Neptune reserves the right to change product or system specifications without notice.

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