



# BHT-200 Series

The BHT product range: With large QVGA screens  
and Microsoft® Windows® CE.NET

## BHT-200 Series: Especially robust and suitable for a variety of purposes



Discover a new freedom: Our portable “all-in-one” devices enable fast and reliable scanning everywhere. A particular advantage is the rapid scanning and processing of the captured data, just one more reason why the terminal is so user friendly.



### High performance

#### Progressive advanced scanning technology

- Advanced scanning CCD (Charged Coupled Device) system for fast scanning at ranges of up to 700 mm

#### High-speed processing

- A specially developed driver ensures high-speed processing of the scanned bar code data, which then appears on the display immediately.

#### High-speed data transfer

- Standard RF technology pursuant to IEEE802.11b enables wireless data transfer with 11 Mbit/s
- Security standards WPA/802.1x, WPA/PSKK

### Long life

#### High durability

- No moving parts in the CCD scanning element
- Shock resistant (resists repeated dropping onto concrete from a height of 1.20 m)
- Dust and waterproof pursuant to international standard IP54

### Versatile

#### Gungrasp models

- Designed for various industrial logistics applications
- Extra battery in the grip enables longer use without mains supply

### User-friendly

#### Microsoft® Windows® CE.NET 5.0

- The embedded operating system provides an open architecture for application development.

#### Development tools

- Microsoft® embedded Visual C++4.0 (latest Service Pack)
- Microsoft® Visual Studio®.NET 2003/2005 (VB.NET & C#)
- BHT-200 Software Developer's Kit (SDK)

|   |                      | BHT-212B-CE  | BHT-262B-CE                     | BHT-282B-CE                     | BHT-212BW-CE                                 | BHT-232BW-CE                    | BHT-262BW-CE                    | BHT-282BW-CE                    | BHT-212QW-CE  | BHT-262QW-CE                    | BHT-282QW-CE                    |
|---|----------------------|--|---------------------------------|---------------------------------|--|---------------------------------|---------------------------------|---------------------------------|---|---------------------------------|---------------------------------|
| Controller                                      |                      |  |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| CPU   |                      | Intel® XScale™ PXA 270 (520 MHz)   |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| Memory  |                      | RAM: 128 MB (User area: 90 MB), Flash memory: 64 MB (User area: 30 MB)   |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| Operating system                                |                      | Microsoft® Windows® CE.NET 5.0   |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| Display   |                      |  |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| Resolution                                      |                      | 240 x 320 dots (QVGA)  |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| Display device                                  |                      | Liquid crystal dot matrix color display  |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| Frontlight                                      |                      | White LED Type front light   |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| Scanner   |                      |  |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| System  |                      | Advanced Scanning (CCD) 1D   |                                 |                                 |  |                                 |                                 |                                 | Area Scanning (CCD) 2D  |                                 |                                 |
| Scanning area                                   |                      | Max 900 mm <sup>(1)</sup>  |                                 |                                 |  |                                 |                                 |                                 | Max 260 mm <sup>(2)</sup>   |                                 |                                 |
| Scanable codes                                  | 2D codes             | –  |                                 |                                 |  |                                 |                                 |                                 | QR Code, Micro QR Code, PDF417, MicroPDF417, Maxi Code, DataMatrix, EAN.UCC Composite   |                                 |                                 |
|   | Bar codes            | EAN-13/-8 (Jan-13/-8), UPC-A/-E, UPC/EAN with add-on codes, Interleaved 2 of 5, CODABAR (NW-7), CODE39, CODE93, CODE128 (EAN-128), Standard 2 of 5, MSI Code |                                 |                                 |  |                                 |                                 |                                 | EAN-13/-8 (JAN-13/-8), UPC-A/-E, UPC/EAN with add-on codes, Interleaved 2 of 5, CODABAR (NW-7), CODE39, CODE128 (EAN-128), Standard 2 of 5, MSI Code, RSS |                                 |                                 |
| Resolution                                      | 2D codes             | –  |                                 |                                 |  |                                 |                                 |                                 | 0.25 mm   |                                 |                                 |
|   | Bar codes            | 0.15 mm  |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| Scanning confirmation                           |                      | 2-color LED (red/blue), buzzer, vibrator   |                                 |                                 |  |                                 |                                 |                                 | Blue LED, buzzer (with volume control), vibrator  |                                 |                                 |
| Keypad  |                      |  |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| Number of keys<br>(n: numeric, a: alphanumeric) |                      | 26 keys (n)<br>+ 2 trigger keys  | 30 keys (a)<br>+ 2 trigger keys | 30 keys (a)<br>+ 3 trigger keys | 26 keys (n)<br>+ 2 trigger keys              | 26 keys (n)<br>+ 3 trigger keys | 30 keys (a)<br>+ 2 trigger keys | 30 keys (a)<br>+ 3 trigger keys | 26 keys (n)<br>+ 2 trigger keys   | 30 keys (a)<br>+ 2 trigger keys | 30 keys (a)<br>+ 3 trigger keys |
| Communications                                  |                      |  |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| Optical interface                               | Standard             | Infrared (IrDA-SIR 1.2 compliant)  |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
|   | Speed <sup>(3)</sup> | 115.2 kbit/s   |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
|   | Range <sup>(3)</sup> | Approx. 15 cm  |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| Wireless interface                              | Standard             | –  |                                 |                                 | IEEE802.11b                                  |                                 |                                 |                                 | IEEE802.11b   |                                 |                                 |
|   | Frequency            | –  |                                 |                                 | 2.4 GHz                                      |                                 |                                 |                                 | 2.4 GHz   |                                 |                                 |
|   | Range <sup>(3)</sup> | –  |                                 |                                 | Indoor: approx. 75 m, outdoor: approx. 150 m |                                 |                                 |                                 | Indoor: approx. 75 m, outdoor: approx. 150 m  |                                 |                                 |
|   | Speed <sup>(3)</sup> | –  |                                 |                                 | 11/5.5/2/1 Mbit/s (automatic selection)      |                                 |                                 |                                 | 11/5.5/2/1 Mbit/s (automatic selection)   |                                 |                                 |
|   | Security             | –  |                                 |                                 | WPA  |                                 |                                 |                                 | WPA   |                                 |                                 |
|   | Authentication       | –  |                                 |                                 | EAP-TLS, PEAP                                |                                 |                                 |                                 | EAP-TLS, PEAP   |                                 |                                 |
| Cable interface                                 |                      | RS232C (115.2 kbit/s max), USB 1.1 (Mini-B)  |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| Power supply                                    |                      |  |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| Main battery                                    |                      | Lithium-ion battery  |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| Operating hours <sup>(4)</sup>                  |                      | 15 hours   | 30 hours <sup>(5)</sup>         | 15 hours                        | 30 hours <sup>(5)</sup>                      | 15 hours                        | 30 hours <sup>(5)</sup>         | 12 hours                        | 12 hours  | 24 hours <sup>(5)</sup>         |                                 |
| Equipment                                       |                      |  |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| Auxiliary functions                             |                      | Clock, buzzer, vibrator, remaining battery   |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| Grip  |                      | –  | Gun grip                        | –                               |  |                                 |                                 | Gun grip                        | –   | Gun grip                        |                                 |
| Environmental requirements                      |                      |  |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| Operating temperature                           |                      | –5 °C ~ 50 °C  |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| Splash water/dust proof                         |                      | IP54   |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| Shock resistance                                |                      | 1.20 m/30 times on concrete floor <sup>(6)</sup>   |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
| Weight  |                      |  |                                 |                                 |  |                                 |                                 |                                 |   |                                 |                                 |
|   |                      | Approx. 360 g  | Approx. 440 g                   | Approx. 380 g                   | Approx. 460 g                                | Approx. 380 g                   | Approx. 460 g                   | Approx. 390 g                   | Approx. 470 g   |                                 |                                 |

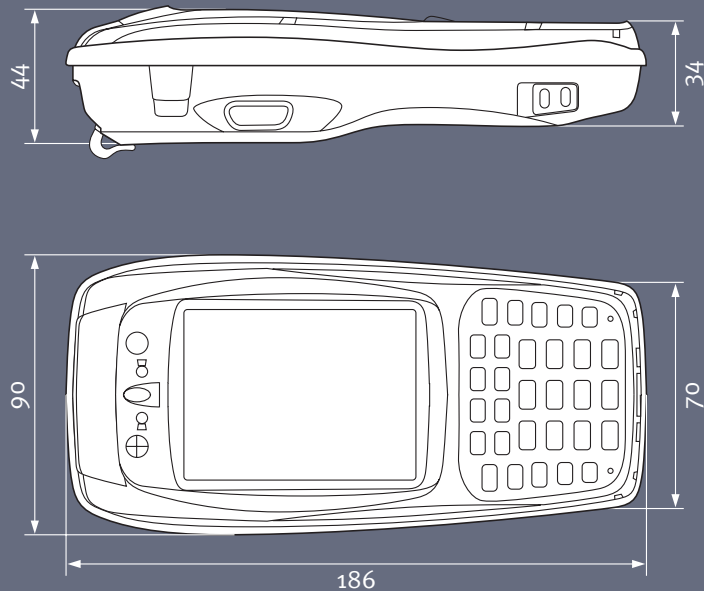
(1): Narrow bar width 1.0 mm or over, peripheral lighting min 500 lux  
(2): Bar code: Narrow bar width 0.25 mm or over, peripheral lighting min 500 lux  
(3): Maximum range and speed depend on operating conditions

(4): When reading twice in a 10 seconds and not using the wireless interface  
(5): Two batteries  
(6): Test value; not guaranteed



# BHT-200

## Dimensions in mm



## Accessories

- Lithium-ion battery BT-20LB
- Stylus
- Hand strap

## Optional Accessories (not supplied)

- Communication unit  
(USB 1.1 interface)
- Cradle (Charging only)
- Lithium-ion battery charger CH-201
- Holster
- Softcase



## Note

Carefully read the user manual before using the device. Specifications are subject to change without notice. Information current as of May 2009.

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