

**CIPHER LAB**  
Smarter

# 1600 series

**Kreski**



## Pocket-sized Scanner

Designed for healthcare, field sales and service environments, the CipherLab 1600 series brings high flexibility to the workers in the workplace. The *Bluetooth®* communication and pocket-sized form factor with extreme lightweight unleash workers and allow them to go where the work is and get more done, in more places.





# 1600<sup>series</sup>

Pocket-sized Scanner



## Simple. Powerful. Portable.

Smaller and lighter than a mobile phone, the 1600 series can be easily fit in your pocket and carried around for required tasks wherever it takes. The 1600 series is built to meet the needs in healthcare, field sales and field service with strong mobility requirement. Optional *Bluetooth*® connectivity allows instant data acquisition to a *Bluetooth*® compatible PDA, laptop, PC or any other *Bluetooth*®-enabled devices. With a choice of linear imager, laser or 2D imager, your business needs will be met in a wide range of applications.



### Maximum Mobility and Durability in Pocket-size

The 1600 series liberates and mobilizes healthcare and field workers with its ultra-portable, light-weight form factor combined with optional *Bluetooth*® connectivity. Mobile salespeople or field service technicians could combine the 1600 series with a PDA or Smartphone to collect and transmit data via WWAN, ensuring the back-end system is always up-to-date. Furthermore, the pocket-sized IP42 certified device passed the 1.5 m drop test which allows workers to roam freely about their workspaces without worries.



### Versatile Symbology Support

With optional linear imager, laser and 2D imager, the 1600 series can sufficiently retrieve 1D barcode data up to 3 mil resolution. Additionally, the 1600 series ensures hospitals, pharmacies, clinics and laboratories are ready to meet the growing adoption of 2D barcodes on the product packaging. CipherLab 1600 series is also ideal for scanning patient identification bracelets and medication labels. It frees healthcare professionals from paperwork, allowing them to provide higher-quality care to patients.



## Smart Solution with Immediate Payoffs

### Simplifying and streamlining with CipherLab 1600 series scanners

Hong Kong's historic Tung Wah Hospital adopts CipherLab 1600 series scanners to more efficiently deal with fixed assets.



After expanding to nearly 700 beds, it was clear to Tung Wah Hospital administration that they needed an efficient way to inventory fixed assets. With the decision to deploy CipherLab 1600 series *Bluetooth*® scanners paired with laptops and PCs, the hospital has seen an enormous reduction in labor and cost associated with asset management.



## Optimum Storage Capacity and Reliable Data Transmission

The 1600 series can hold over 240,000 scans\* in batch mode when used as a memory scanner, allowing workers to complete the maximum number of tasks without interruption. Besides, the scanners also have buffer memory up to 10 KB for up to 600 scans\* ensuring no data is lost if a worker is out of *Bluetooth*® working range. Once the worker is back in range, information is automatically uploaded to the back-end system.

\*The calculation is based on EAN13 barcode

## Long Lasting Performance, Optimal Productivity

The 1600 series allows employees optimal productivity by providing long working hours for all-day data collection on either replaceable AAA batteries, or rechargeable Li-ion batteries. The less the time is wasted on frequent recharging, the more the human resource can be released to serve more patients.

## Instant Pairing via *Bluetooth*®

Paired with the CipherLab 3610 *Bluetooth*® transponder, the 1600 series allows real-time data transmission to laptop, computer, or tablet. Having an extended *Bluetooth*® working range of up to 20 meters gives users more flexibility, caregivers, for example, can scan patients' wristbands without pushing around a medical cart.

## Time Stamp – Keeping Track for Data Analysis

Time Stamp is an excellent tracking function that associates all of the barcode reads with the exact date and time. Its accurate time keeping makes efficient data analysis effortless. You can now evaluate the time that a worker is needed to finish a round of data collection. (For 1662 / 1663 / 1664)

## Higher Flexibility with Extensive Software Support

### ScanMaster –

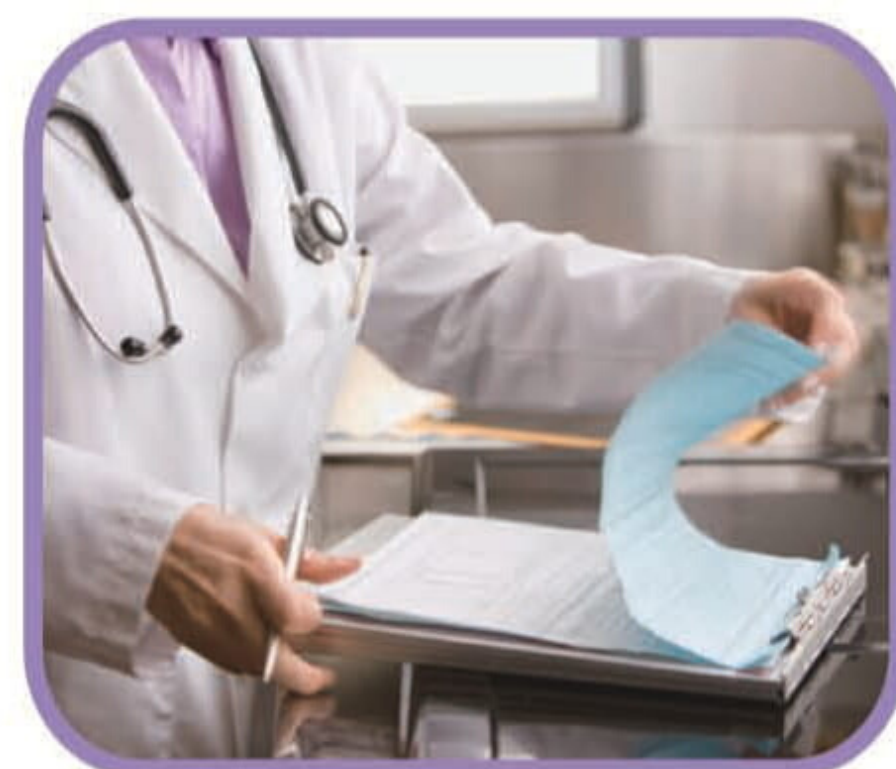
#### Custom Configure Scanners at No Additional Cost

The ScanMaster software offers a comprehensive solution to configure scanners, edit format and symbol types, and much more. It's easy to use and set up through the standard Windows® interface. All generated settings can be saved and printed out as barcodes to share with other users, so other users can scan to configure their scanners.

### CipherConnect – Work Smarter Utilizing PDAs and Smartphones

CipherConnect is a COM-to-key software utility designed for CipherLab cordless scanners to work as an input device for smart devices – enabling intensive data collection via *Bluetooth*® Serial Port Connection. Now it is available for Android, Blackberry, and Windows® Mobile via *Bluetooth*® SPP (Slave).\*

\*Apple's iPhone, and iPod Touch (2nd Generation) support *Bluetooth*® HID profiles when running iOS 4 and above, where CipherConnect isn't needed to pair with CipherLab cordless scanners.





# 1600 series

## Pocket-sized Scanner



|                  |  | 1662   | 1663   | 1664   |
|------------------|--|--|--|--|
| RF Communication | Module   | Bluetooth® Class 2 (2.4 GHz) Version 2.1 +EDR  |  |  |
|                  | Coverage                                       | 20 m / 66 ft. line of sight  |  |  |
|                  | Standard profile                               | SPP, HID   |  |  |
| Performance      | Category                                       | Bluetooth® laser scanner   | Bluetooth® linear imager scanner   | Bluetooth® 2D imager scanner   |
|                  | Optical sensor                                 | Laser  | 2500 pixels  | 752 x 480 pixels   |
|                  | Light source                                   | Visible laser diode at 650 nm  | 625 ±5 nm Red LEDs (2x)  |  |
|                  | Resolution                                     | 4 mil  | 3 mil  | 3 mil - 1D barcode / 5 mil - 2D barcode  |
|                  | Depth of field (depends on barcode resolution) | 2 to 42 cm / 0.8 to 16.5 in.   | 2.4 to 38 cm / 0.9 to 15 in.   | Code 39 3 mil: 6.9 to 10.7 cm / 2.7 to 4.2 in.<br>Code 39 5 mil: 3.6 to 18.5 cm / 1.4 to 7.3 in.<br>UPCA 13 mil: 4.0 to 30.5 cm / 1.6 to 12 in.<br>PDF417 5 mil: 7.1 to 11.4 cm / 2.8 to 4.5 in.<br>PDF417 6.67 mil: 4.8 to 17.5 cm / 1.9 to 6.9 in. |
|                  | Scanning angle                                 | Pitch ± 65°, Skew ± 50°  | Pitch ±70°, Skew ±70°  | Pitch ± 60°, Skew ± 60°  |
|                  | PCS  | Minimum 30%  |  |  |
|                  | Scan rate                                      | 100 scans / second   | 200 scans / second   | 60 scans / second  |
|                  | Barcodes supported                             | Codabar, Code 32, Code 39, Trioptic Code 39, Code 93, Code 128, Industrial 2 of 5, Interleaved 2 of 5, ISBT-128, Italian Pharmacodes, MSI Plessey, Bookland EAN, GS1-DataBar, GS1 DataBar-14, GS1 DataBar Limited, GS1 DataBar Expanded, UPC-A, UPC-E, UPC-E1, EAN-8, EAN-13 | Codabar, Code 39, Code 93, Code 128, GS1 DataBar(RSS), Industrial 2 of 5, Italian and French Pharmacodes, Interleave 2 of 5, Matrix 2 of 5, MSI, Plessey, Telepen, UPC/EAN/GS1-128, and more | 1D: All major codes¹<br>2D: PDF417, MicroPDF417, Composite, RSS, TLC-39, Datamatrix, QR code, Micro QR code, Aztec, MaxiCode<br>Postal Codes: US PostNet, US Planet, UK Postal, Australian Postal, Japan Postal Dutch Postal (KIX)                   |
|                  | Programmable features                          | Data editing, interface selection, symbology configuration   |  |  |
|                  | Language support                               | US and UK English, French, Italian, Belgian, Norwegian, Swedish, Spanish, Portuguese, German, Swiss German, Japanese, Turkish, Hungarian, and Danish   |  |  |
| Physical         | Weight (including battery)                     | 100 g / 3.53 oz  | 106 g / 3.7 oz.  |  |
|                  | Size LxWxH                                     | 11.3 x 4.5 x 3.0 cm / 4.4 x 1.8 x 1.2 in.  |  |  |
|                  | Color  | Black  |  |  |
|                  | Button   | Power and scan keys  |  |  |
|                  | Memory   | 4 MB   |  |  |
| Electrical       | Working hours                                  | 35 hours based on 1 scan / 5 seconds   | 40 hours based on 1 scan / 5 seconds   | 24 hours based on 1 scan / 5 seconds   |
|                  | Power Supply                                   | Li-ion 3.7V, 850 mAh   |  |  |
|                  | Power consumption Standby / Operating          | 20 mA / 100 mA @3.7 V  | 20 mA / 224 mA @3.7V   | 20 mA / 250 mA @ 3.7 V   |
| User Environment | Temperature                                    | Operating : 0 °C to 50°C / 32°F to 122°F, Storage : -20°C to 60°C / -4°F to 140°F( w/o battery )   |  |  |
|                  | Humidity (non-condensing)                      | Operating : 10% to 90% / Storage: 5% to 95%  |  |  |
|                  | Impact resistance                              | 1.5 m / 4.9 ft. multiple drops onto concrete   |  |  |
|                  | Ingress protection                             | IP42   |  |  |
|                  | Electrostatic discharge                        | ± 8 kV contact / ± 15 kV air   |  |  |
|                  | EMC regulation                                 | BSMI, CE, C-tick, FCC, NCC, IC, TELEC, SRMC  | BSMI, CE, FCC, NCC, TELEC  | BSMI, CE, C-tick, FCC, NCC, IC, TELEC, SRMC  |
| Configuration    |  | Setup option includes Windows®- based ScanMaster software  |  |  |
| Accessories      |  | 3610 Bluetooth® transponder, Micro USB cable, battery charger, protective cover  |  |  |
| Warranty         |  | 1 year   |  |  |

1. All of the barcodes that 1664 2D scanner can read except French Pharmacode, Plessey, and Telepen.

ACCESSORIES



3610 Bluetooth® Transponder



Battery Charger



Protective Cover

Antimicrobial Protection Series



1600H



3610H