

CIPHER LAB
Smarter

1600 series



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 series

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 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. The pocket-sized device is easy to carry, allowing workers to roam freely about their workspaces. Furthermore, 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.



Versatile Symbology Support

With optional linear imager, laser and 2D imager 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 10,000* scans when used as a memory scanner, allowing workers to complete the maximum number of tasks without interruption. Besides, the scanners also have buffer memory ensuring that no data is lost if a worker is out of *Bluetooth*® working range. Once the worker steps back in range, information is automatically uploaded to the back-end system preventing data loss at essential moments.

*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. For a hospital, especially in its peak hours, the scanners can work across nurses' shifts to ensure no time is wasted on frequent recharging. While the efficiency of daily routines is improved, more human resource will 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 any computer with a USB port – no setup required. With a *Bluetooth*® working range of at least 10 meters, caregivers, for example, can scan patients' wristbands without pushing around a medical cart. Once the wristband is scanned, the patient information will be shown on the tablet screen on the medical cart, allowing for appropriate and timely medical care.



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.



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		1660	1661	1662	1664
RF Communication	Module	Bluetooth® Class 3 (2.4 GHz) Version 2.0		Bluetooth® Class 2 (2.4 GHz) Version 2.1+EDR	
	Coverage	10 m / 33 ft. line of sight		20 m / 66 ft. line of sight	
	Standard profile	SPP, HID			
Performance	Category	Bluetooth® linear imager scanner		Bluetooth® laser scanner	Bluetooth® 2D imager scanner
	Optical sensor	2500 pixels		Laser	752 x 480 pixels
	Light source	Red LED 625 nm		Visible laser diode at 650 nm	625 ± 5 nm LEDs (2x)
	Resolution	3 mil		4 mil	3 mil - 1D barcode / 5 mil - 2D barcode
	Depth of field (depends on barcode resolution)	3.5 to 38 cm / 1.4 to 15 in.		2 to 42 cm / 0.8 to 16.5 in.	Code 39 3 mil: 6.9 to 10.7 cm / 2.7 to 4.2 in. Code 39 5 mil: 3.6 to 18.5 cm / 1.4 to 7.3 in. UPCA 13 mil: 4.0 to 30.5 cm / 1.6 to 12 in. PDF417 5 mil: 7.1 to 11.4 cm / 2.8 to 4.5 in. PDF417 6.67 mil: 4.8 to 17.5 cm / 1.9 to 6.9 in.
	Scanning angle	Pitch ± 70° Skew ± 70°		Pitch ± 65°, Skew ± 50°	Pitch ± 60° Skew ± 60°
	PCS	Minimum 30%			
	Scan rate	100 scans / second		100 scans / second	60 scans / second
	Barcodes supported	Codabar, Code 39, Code 93, Code 128, GS1 DataBar (RSS), Industrial 2 of 5, Interleave 2 of 5, ISBT-128, Italian and French Pharmacodes., Matrix 2 of 5, MSI, Plessey, Telepen, UPC-A, UPC-E, EAN-8, EAN-13, GS1-128 (EAN-128)		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	1D: All major codes ¹ 2D: PDF417, MicroPDF417, Composite, RSS, TLC-39, Datamatrix, QR code, Micro QR code, Aztec, MaxiCode 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, Japanese, Turkish and Hungarian			
Physical	Weight (including battery)	50 g / 1.76 oz.	69 g / 2.43 oz.	100 g / 3.53 oz	106 g / 3.7 oz.
	Size LxWxH	9.5 x 3.5 x 2 cm / 3.7 x 1.4 x 0.8 in.		11.3 x 4.5 x 3.0 cm / 4.4 x 1.8 x 1.2 in.	
	Color	Grey		Black	
	Button	Power and scan keys			
	Memory	256 K	512 K	4 MB	
Electrical	Working hours	30 hours based on 1 scan / 5 seconds	40 hours based on 1 scan / 5 seconds	35 hours based on 1 scan / 5 seconds	24 hours based on 1 scan / 5 seconds
	Power Supply	Two AAA batteries		Li-ion 3.7V, 850 mAh	
	Power consumption Standby / Operating	15 mA / 245 mA @ 3 V	17 mA / 190 mA @3.7 V	20 mA / 100 mA @3.7 V	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	--	0.9 m / 3.0 ft. multiple drops onto concrete	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, KC		BSMI, CE, C-tick, FCC, NCC, IC, TELEC, SRMC		
Configuration	Setup option includes Windows®- based ScanMaster software				
Accessories	3610 Bluetooth® transponder, protective cover		3610 Bluetooth® transponder, Micro USB cable, battery charger, protective cover		
Warranty	1 year				

1. All of the barcodes that 1600 series 1D scanner can read except French Pharmacode, Plessey, and Telepen.

ACCESSORIES	Antimicrobial Protection Series				
					
3610 Bluetooth® Transponder	Battery Charger	Protective Cover	1600H	3610H	



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