



ANTIMICROBIAL

protection series



8001H

1500H

1661H

When Cleanliness Counts

CipherLab Safeguards Products with Antimicrobial Protection





Fighting Microbes While Delivering High Work Efficiency

In an industry where cleanliness is vital, the importance of helping prevent the growth of microbes is escalating. CipherLab addresses the needs of an AIDC application in a healthcare environment with its newly developed series of products with antimicrobial protection to resist the growth of odor-and-stain-causing bacteria.

In cooperation with Microban[®]*, CipherLab has developed a series of ergonomically designed mobile computer and scanners with Microban[®] antimicrobial technology – 8001H, 1500H, and 1661H – for convenient data access, data collection, and data transfer. AIDC instruments with antimicrobial protection not only speed up routine daily tasks but also inhibit the growth of odor-and-stain-causing bacteria.

The enhanced sanitary protection resulting from both antimicrobial protection and disinfectant-friendly housing inhibits the growth of bacteria that can cause odors and stains, and keeps the scanner cleaner between cleaning.

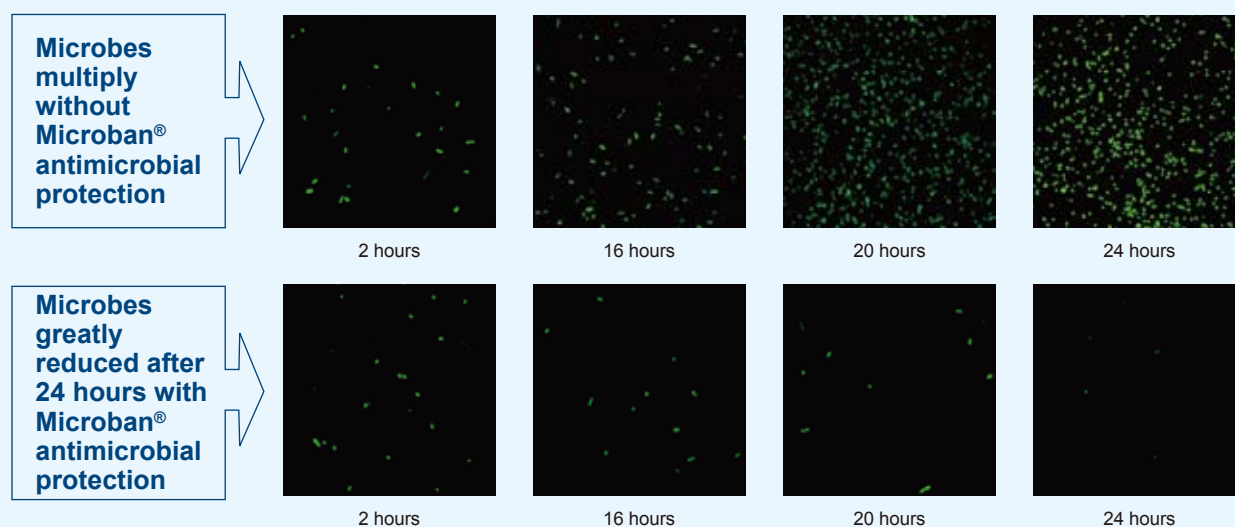
*Founded in 1994, Microban International, Ltd. is the global leader in built-in antimicrobial product protection, engineering durable antimicrobial solutions for over 1,000 types of consumer, industrial, and medical products around the world. Microban[®] technology can inhibit the growth of Gram-positive and Gram-negative bacteria on treated product surfaces. For more information, please visit www.microban.com.



Antimicrobial Treatment Helps Reduce Microbial Growth

Unlike other devices claiming antimicrobial protection, which are often just coated with a protective film, CipherLab's antimicrobial protection series has the Microban® antimicrobial technology built into the product itself – not just a coating that wears off with repeated use of alcohol wipes. Once bacteria come into contact with the surface, the biological function of the microbe is disrupted, interrupting the lifecycle and stopping the reproduction of

bacteria. The antimicrobial effect is an intrinsic part of the device and it will not wear off during its lifetime. By minimizing the presence of microbes, devices are easily kept clean for use every time. There are less odors and stains resulting from microbial growth. These products with antimicrobial protection will have a lower average bioburden during their lifetime.



Note: This information is based on standard laboratory tests and is provided for comparative purposes to substantiate antimicrobial activity for non-public health applications. The technology is not designed to protect users from disease caused by microorganisms. The antimicrobial protection inhibits the growth of microorganisms that cause stains, odors, and product degradation, and it is limited to the product's surface.

Disinfectant-Friendly Housing for a Clean and Hygienic Surface

Periodically wiping a device with alcohol can keep most surfaces free of microbes for a brief period. However, the repeated use of alcohol causes discoloration, corrosion, and other deterioration problems, which in turn can lead to hardware malfunction. The launch of the new antimicrobial

protection series has an extra feature of disinfectant-friendly white housing that allows the antimicrobial treated surface to withstand repeated alcohol cleaning. Fewer replacements are needed, resulting in a lower total cost of ownership.

Antimicrobial Protection Series Overview



8001H

Light and Compact for Efficient Data Capture

- Easy-to-learn interface means a shorter training period and learning curve for new, temporary staff, or substitute nurses – maximizing work efficiency.
- 100 continuous hours of operation in batch mode on a lithium-ion rechargeable battery gives an efficient workflow without having to interrupt tasks.
- Lightweight and pocket-sized for greater mobility while taking up minimal space.
- FORGE AG software helps customize workflow and templates to suit unique work routines and use.
- Recommended for inventory stock control, product orders, patient record access during diagnosis, point-of-care, record management, lab tests, and specimen tracking.



1500H

Snappy Scanner Built for Comfort

- Decode rate at 200 times per second and able to read high density 1D barcodes at 3 mil resolution.
- No moving parts for a lower total cost of ownership.
- Adjustable stand for three different uses: mounted on the wall, placed on a desk, or in a fixed position for auto-sense scanning.
- Lightweight and ergonomic design that can render thousands of repetitive scans without fatigue.
- Large LED light and adjustable buzzer confirms when a scan has been captured successfully, even in dim lighting, to avoid duplicate scanning.
- Using ScanMaster software, users can easily edit data, configure symbology, and select a relevant interface.
- Recommended for patient admittance identification, drug identification, and medical billing.



1661H

Pocket-sized for Maximum Mobility and Flexibility

- Bluetooth interface for convenient data transfer to any Bluetooth device, such as a laptop. With the 3610 Bluetooth transponder, easy pairings simplify real-time data transmission to any device for instant viewing.
- The lithium-ion battery lasts for 40 hours—enabling completion of tasks without time wasted on battery recharge.
- 512K on-board memory stores over 30,000* barcode scans when the 1661H is set to batch mode.
- Lightweight and pocket-sized, with Bluetooth capabilities for maximum mobility.
- The ScanMaster software enables easy data editing and configuration of symbologies, as well as tailoring the interface to suit individual work routines.
- Recommended for point-of-care, medication dispensing, records management, lab results, and specimen tracking.

* The calculation is based on EAN13 barcode.

Caregivers Gain Time for Their Patients

Caregivers free up valuable time, allowing them to spend more time with their patients.

At the China Medical University Hospital (CMUH) in Taiwan, caregivers manually recorded patients' condition at their bedsides and then entered the information at the nursing station. This was very time consuming and often meant that caregivers were spending a great deal of time on paperwork. With the implementation of the CipherLab 8000 mobile computer, caregivers can now scan barcodes on a patient's wristband to instantly update their medical records. They are able to continuously keep track of a patient's symptoms on the terminal and upload this data via the communication cradle once back at the nursing station. The data can be instantly displayed on a laptop or a monitor for on-duty doctors to view. Thereafter, the time saved from the tedious paperwork can be spent with patients for better, more personal treatment.



Keeping Costs Down and Saving Time

Nursing homes in the Czech Republic gained accuracy and retrieved money on their billing system.

When the Czech Republic made the transition to a capitalist structure, medical billing was no longer covered by the state – patients had to pay for their healthcare. Nursing home staff billed patients by recording charges on hand-written forms and spreadsheet-based systems. This took time and often resulted in human error, which was not only worrying for patients but was costing the nursing homes money. With the introduction of the CipherLab 8001 mobile computer to scan barcodes on medical records and wristbands, patient information can be correctly documented with just a single scan. Now caregivers can store scanned data in the terminal and easily upload this data to the system when they are at their desks.

Accurate Treatment for Patients

With the right care being dependent on handwritten notes, the Taipei Veterans General Hospital decided to safeguard their patients against potential errors.

When Taipei Veterans General Hospital adopted the CipherLab small size 1660 Bluetooth scanners to record patients' information, there were numerous benefits. With its handy size, caregivers were given the mobility that they needed. By just scanning a patient's wristband, the caregiver can now see all physician notes, medication orders, and all relevant patient data directly on their tablets via Bluetooth communication. The displayed data enables caregivers to issue proper and accurate medical treatment to their patients. Once the patient has been treated, the caregiver can update the information on a tablet or notebook, and use the wireless communication to update the HIS system. This ensures that all patient information is kept up to date at all times.





		8001H
Communication	Options	Batch
	Serial	IrDA (115.2Kbps)
Performance	CPU	16 - bit
	Program memory	2MB flash
	Data memory	2MB/4MB SRAM
	Operating power	Li-ion 3.7V, 700mAh
	Backup power	Rechargeable lithium 3.0V, 7.0 mAh
	Working time	100 hours
	Data retention	30 days
Data Capture	Alert	Dual-color LED, vibrator, volume-programmable beeper
	Barode scanning	Linear imager / Laser
Physical Characteristics	Display	LCD 100 x 64 with LED backlight
	Keypad	21 rubber keys with white LED backlight
	Dimensions L x W x H	122 x 56 x 32 mm / 4.8 x 2.2 x 1.25 in.
	Weight laser, including battery	120 g / 4.2 oz.
User Environment	Operating temperature	-10 °C to 60 °C / 14 °F to 140 °F
	Storage temperature	-20 °C to 70 °C / -4 °F to 158 °F
	Humidity no condensed	Operating: 10% to 90% Storage: 5% to 95%
	Impact resistance	Multiple 1.2m / 4 ft. drops onto concrete, 5 drops on each side
	Electrostatic discharge	± 15 kV air discharge / ± 8 kV direct discharge
	EMC regulation	BSMI, CE, C-Tick, FCC, IC
Development Software		CipherLab Power Suite BLAZE C Compiler and BASIC Compiler
Application Software		CipherLab Power Suite FORGE Application Generator including data transmission OCX, STREAM Wireless Studio, MIRROR Terminal Emulation
Cradles		Charging and communication cradle, Modem cradle, Ethernet cradle
Accessories		4-slot battery charger, AC / DC adapter, RS232 cable, USB cable
Warranty		1 year



		1500H	1661H
Communication	Module	-	Bluetooth Class 3 (2.4 GHz) Version 2.0
	Converage (line of sight)	-	10 m / 33 ft. line of sight
	Standard profile	-	SPP, HID
Performance	Category	Linear imager scanner	Bluetooth linear imager scanner
	Optical sensor	2500 pixels	2500 pixels
	Light source	Red LED (625nm)	Red LED 625 nm
	Resolution	3 mil	3 mil
	Depth of field (13mil barcode)	0.5 to 35 cm / 0.2 to 13.8 in	3.5 to 38 cm / 1.4 to 15 in.
	Scanning angle	Pitch ± 70° Skew ± 70°	Pitch ± 70° Skew ± 70°
	PCS	Minimum 30%	Minimum 30%
	Scan rate	200 scans/second 200 decodes/second	100 scans/second
	Ambient illumination	100,000 lux	-
	Hands-free scanning	Auto-sense and continuous modes	-
	Barcodes support	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 / EAN / GS1-128, and more	
	Programmable features	Data editing, interface selection, symbology configuration	
	Language support	US and UK English, French, Italian, Belgian, Norwegian, Swedish, Spanish, Portuguese, German	
Physical Characteristics	Weight (including battery)	145 g / 5.1 oz	69 g / 2.4 oz
	Dimensions LxWxH	-	9.5 x 3.5 x 2 cm / 3.7 x 1.4 x 0.8 in.
	Color	White	
Electrical	Switch	Tactile Switch	Push-button switch, plus [Delete] key
	Memory	-	512K
	Working time	-	40 hours based on 1 scan / 5 seconds
	Operating power	+5 V ±10%	Li-ion 3.7V, 850 mAh
User Environment	Power consumption Standby / operating	50 mA / 265 mA	17 mA / 190 mA
	Temperature	Operating: 0 °C to 50°C / 32°F to 122°F Storage: -20°C to 60°C / -4°F to 140°F	Operating: 0 °C to 50°C / 32°F to 122°F Storage: -20°C to 60°C / -4°F to 140°F
Configuration	Humidity (non-condensing)	Operating: 10% to 90% Storage: 5% to 95%	Operating: 10% to 90% Storage: 5% to 95%
	Impact resistance	1.5 m / 4.9 ft multiple drops onto concrete	90 cm / 3.0 ft. multiple drops onto concrete
	Ingress protection	IP30	-
	Electrostatic discharge	±8 kV contact ±15 kV air	±8 kV contact ±15 kV air
Accessories	EMC regulation	BSMI, CE, C-tick, FCC, IC, MIC	BSMI, CE, C-tick, FCC, MIC, NCC, IC, TELEC, SRMC
	Setup options include Window®-based ScanMaster software (included), by direct connection or printing out barcode settings	Setup options include Windows®-based ScanMaster software (included)	Setup options include Windows®-based ScanMaster software (included)
Warranty		5 years	1 year

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