

# 8700 series



## Industrial Mobile Computer

The new CipherLab 8700 series is built to perform at optimum under harsh conditions with its rugged design, low power consumption and versatile software tools. The tough exterior can handle intense factors encountered in the manufacturing, transportation and logistics industries. In addition, the device comes with software for fast and easy customization to streamline your business operations with ease.





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## Robust and Effective for Seamless Integration to Improve Operations

The 8700 series can improve the efficiency of your manufacturing, transportation and logistics business. Its durable design can function under harsh surroundings, and its intuitive Graphical User Interface (GUI) is user-friendly. Equipped with a wide range of wireless connections, the 8700 helps improve communication and process. Furthermore, it is packed with features and software to automate your business operations and enhance the competitive advantages.



### Optimized Performance under Harsh Environment

The 8700 series can withstand the exposures of a harsh working environment. Its ability to tolerate temperature fluctuations from -20°C to 55°C is ideal to suit various environments – from refrigeration industry, to chemical plants. The IP64-rated device offers protection against everyday elements such as water spray and dust. The 8700 series has been test-proven to manage 1.5-meter drops onto concrete so you can save time and money on maintenance. Additionally, the large keypad allows workers to effortlessly enter information, even with gloves on. The 8700 series can adapt to any industry environment, making it multipurpose.



### Access Information Quickly and Easily

The 8700 reduces downtime as information is promptly accessed at any procedural step. Featuring a large 3-inch 160 x 160 pixel display with touch screen and Graphical User Interface (GUI), the 8700 offers outstanding clarity for making error-free data input and capturing handwriting signatures. With the LED-backlit keypad, workers can complete their tasks in a variety of lighting conditions. The device incorporates Application Generator (AG) to enable quick development and deployment of custom applications to suit your business. C and Basic Compiler is also available for more advanced programming requirements.



### Wireless Connection Goes Beyond

The 8700 series includes a range of wireless connections to enable personnel on-site and off-site to obtain information. GPS allows managers to accurately locate dispatch trucks to assist with vehicle management. Workers can now receive instant updates via reliable WLAN and 3.5G WWAN. Through wireless transmission, management can simultaneously track manufacturing progress in every stage. As workers move from offices to production areas, data won't be misplaced during crucial moments. The *Bluetooth*® function enables connectivity to other printers so you can seamlessly print barcodes from receiving and inspection, to shipping. With the 8700, wireless connection goes beyond just one aspect to permit more mobilized operations.





## Mobilized Data Solutions for a Streamlined Supply Chain

### Long-Lasting Power Performance, Reliable Multi-Shift Operation Productivity

Durable and low-power consumption, the 8700 series is guaranteed to work as hard as your workers – providing nearly 170\* hours of efficient energy use in batch mode and 66\* hours of continuous WLAN usage. It features a rechargeable 3.7v 4000 mAh Li-ion battery with a backup battery to protect data during battery replacement. Your workers can now work throughout the day performing inventory control and WIP tracking tasks without interruptions.

\*Battery performance may vary depending on product model, configuration, applications, and features utilized.

### Multiple Data Input Options, Maximized Data Collection Efficiency

The 8700 series fulfills your unique application requirements with a variety of data input options – RFID, linear imager, laser, and 2D imager. In addition, the long range laser enables data collection from a distance in a warehousing or manufacturing setting. Whether it's asset tracking on the manufacturing floor or final product shipping, the 8700 series gets your workers ready for work with the reader that best fits the job – minimizing workflow downtime and maximizing productivity for your business.

### Centralize Data Management with Easy Transfers and Powerful Software

In a dynamic working environment, it's essential to incorporate proficient data transfer and simplified customization. With the 8700 series, you are able to connect to a back-end server via File Transfer Protocol (FTP) from the software "Application Generator (AG)" and "C and BASIC Compiler" – data can be transmitted much faster in larger volumes. A centralized data process makes it easier to manage and maintain accurate data at all times. Additionally, the 8700 series can be easily integrated into mainframe back-end with MIRROR Terminal Emulator. The 8700 series truly meets your business demands.

### Extend Your Applications

The CipherLab software development kit enables easy customization for the 8700 series with a variety of applications and tools to satisfy your unique day-to-day operation needs – enabling it to communicate data across platforms to back-end servers via WLAN using FTP (File Transfer Protocol).



Mirror  
Terminal Emulator

Extend complex mainframe applications to CipherLab devices to save time and development effort



Forge  
Application Generator

Easily customize applications for your needs



Blaze  
C and BASIC Compiler

Enable quick development and deployment of custom business applications





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|                          |   | 8700   | 8770  | 8790                  |
|--------------------------|---|--|---|-----------------------|
| Performance              | CPU   | 32-bit   |   |                       |
|                          | Program memory  | 8 MB Flash   |   |                       |
|                          | Data memory   | 4 MB / 12 MB / 20 MB SRAM  |   |                       |
|                          | Expansion   | micro SD slot with SDHC support  |   |                       |
|                          | Operating power   | Rechargeable 3.7 V 4000mAh Li-ion battery  |   |                       |
|                          | Working hours <sup>1</sup>  | 170 hours  | 66 hours <sup>2</sup>   | 10 hours <sup>3</sup> |
|                          | Data retention  | 25 days  |   |                       |
|                          | Alert   | Dual-color LEDs (red / green, blue / green), vibrator, beeper                                  |   |                       |
| Wireless communication   | WLAN  | --   | IEEE 802.11 b/g   |                       |
|                          | WLAN Security   | --   | WEP, EAP, WPA (PSK), WPA2 (TKIP, AES, PSK)  |                       |
|                          | WPAN  | Bluetooth® V2.1+EDR class 2  |   |                       |
|                          | Bluetooth® profile  | SPP, DUN, HID  |   |                       |
|                          | WWAN  | --   | UMTS / HSDPA: Triple band, 850 / 1900 / 2100MHz<br>GSM/GPRS/EDGE: Quad band, 850 / 900 / 1800 / 1900MHz<br>HSDPA features:<br>3.6 Mbps, UL 384 kbps<br>UMTS features:<br>PS data rate – 384 kbps DL / 384 kbps UL<br>CS data rate – 64 kbps DL / 64 kbps UL |                       |
|                          | GPS   | GPS SiRF Star III, internal patch antenna (optional)   |   |                       |
| Data capture             | Barcode scanning  | Linear imager / Laser / Long range laser / 2D imager   |   |                       |
|                          | RFID reader / writer  | Frequency : 13.56MHz / Support tags : ISO 14443A, ISO 14443B, ISO 15693                        |   |                       |
| Physical characteristics | Display   | 3.0" 160x160 pixels, touch screen, white LED backlight   |   |                       |
|                          | Keypad  | 24 numeric / 44 alphanumeric keys, white LED backlight   |   |                       |
|                          | Dimensions ( L x W x H )  | 230 x 91 x 63 mm   |   |                       |
|                          | Weight ( laser reader / battery included.)  | 600 g / 21.2 oz.   |   |                       |
| User environment         | Operating temperature   | - 20°C to 55°C / - 4°F to 131°F  |   |                       |
|                          | Storage temperature   | - 30°C to 70°C / - 22°F to 158°F   |   |                       |
|                          | Humidity (non-condensed)  | Storage 5% to 95% / Operating 10% to 90%   |   |                       |
|                          | Impact Resistance   | Multiple 1.5 m/5 ft. drops onto concrete, 5 drops on each side, 1,000 tumbles at 1m/3ft., IP64 |   |                       |
|                          | Electrostatic discharge   | ± 15kV air discharge / ± 8kV direct discharge  |   |                       |
| EMC regulation           | FCC, CE, BSMI, NCC  |  |   |                       |
| Development support      | BLAZE C Compiler and BASIC Compiler, GUI Library                                      |  |   |                       |
| Application software     | FORGE Application Generator including data transmission OCX, MIRROR Terminal Emulator |  |   |                       |
| Cradles                  | Charging and communication cradle   |  |   |                       |
| Accessories              | Belt holster, protective cover, pistol grip, RS232 cable, USB cable, vehicle charger  |  |   |                       |
| Warranty                 | 1 year  |  |   |                       |

1. Based on one standard laser scan per five seconds with backlight off.
2. Bluetooth® off / IEEE 802.11 b/g on. The test is based on one broadcasting packet per second.
3. Bluetooth® off / IEEE 802.11 b/g off/ WWAN on.



### ACCESSORIES



Charging and Communication Cradle



Pistol Grip



Protective Cover



Belt Holster



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