CipherLab CipherLab RS36

CipherLab RS36 Mobile Computer User Manual

Model: CipherLab RS36

1. INTRODUCTION

This user manual provides comprehensive instructions for the CipherLab RS36 Android 12 Touch Mobile Computer. The RS36 is a robust and versatile device designed for efficient data capture and mobile computing in various professional environments. It integrates a 2D imager barcode scanner, HF RFID functionality, and advanced wireless connectivity options.

2. DEVICE OVERVIEW

The CipherLab RS36 is engineered for durability and ease of use. Familiarize yourself with the device's physical components and design.
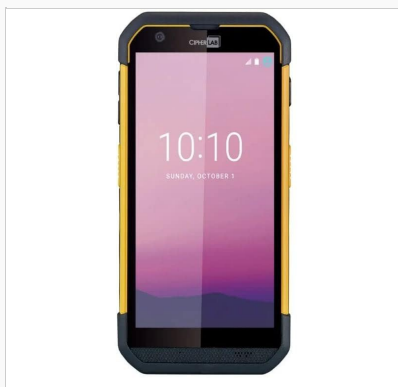

Figure 2.1: Front View. This image shows the front of the CipherLab RS36, highlighting its display screen, which shows the time and date. The device features a durable black and yellow casing.

Figure 2.2: Angled View. An angled perspective of the RS36, illustrating its ergonomic design and the placement of side buttons for easy access during operation.

Figure 2.3: Top View. This view highlights the integrated 2D imager barcode scanner at the top of the device, along with the power button and other controls.

Figure 2.4: Key Features Diagram. An illustrative diagram detailing the primary features of the RS36, such as Wi-Fi 6, Bluetooth 5.1, barcode scanning, RFID capabilities, display size, ruggedness ratings (IP65 & IP68), camera specifications, and battery features including hot-swap functionality.

3. SETUP

Before using your CipherLab RS36, follow these steps for initial setup.

3.1. Battery Installation and Charging

The RS36 uses a hot-swappable Li-ion battery. Ensure the device is powered off or in a safe state before replacing the battery, though the hot-swap function allows for operation during replacement.

1. Locate the battery compartment on the rear of the device.
2. Insert the battery, ensuring it is correctly oriented and securely latched.
3. Connect the device to the charging cable (USB-C) or place it in a compatible charging cradle. The LED indicator will show charging status.
4. Allow the battery to fully charge before first use for optimal performance. A standard battery provides 12+ hours, and an extended battery provides 18+ hours of working time.

Figure 3.1: Battery Access. This image illustrates the battery compartment and the hot-swap feature, allowing for battery replacement without interrupting device operation.

3.2. SIM and Micro SD Card Installation

The RS36 supports dual Nano SIM cards and a Micro SD card for expanded storage.

1. Locate the SIM/Micro SD card slot, typically under the battery or on the side, protected by a cover.
2. Open the protective cover.
3. Insert the Nano SIM card(s) into the designated slots with the gold contacts facing down.
4. Insert the Micro SD card (up to 2TB) into its slot.
5. Close the protective cover securely to maintain the device's IP65/IP68 rating.

3.3. Initial Power On

Press and hold the power button located on the device until the CipherLab logo appears on the screen. The device will boot into the Android 12 operating system.

4. OPERATING INSTRUCTIONS

This section details the primary functions and operations of your CipherLab RS36.

4.1. Basic Navigation

The RS36 features a 5.5-inch HD+ IPS color display with multi-touch capabilities. Navigate the Android 12 (GMS) interface using touch gestures similar to a smartphone. The touch panel supports input from fingers (bare, wet, and gloved) and a stylus.

4.2. Barcode Scanning

The integrated 2D imager allows for rapid and accurate barcode data capture.

1. Open the scanning application on the device.
2. Point the scanner window at the barcode, ensuring the entire barcode is within the aiming pattern.
3. Press the scan trigger button (typically on the side) to activate the imager.
4. A successful scan is usually indicated by an audible beep or a visual confirmation on the screen.

4.3. RFID Functionality

The RS36 supports HF RFID (13.56 MHz) and NFC for various applications.

- **HF RFID:** Supports ISO14443A, ISO14443B, ISO15693, and Felica standards. Hold the device near an RFID tag to read or write data using a compatible application.
- **NFC:** Supports Peer-to-Peer, Card Reader, and Card Emulation modes. Use NFC for quick data exchange or payment applications.
- **UHF RFID (Optional):** The device can be attached to an optional UHF RFID reader for extended RFID capabilities.

4.4. Wireless Connectivity

The RS36 offers robust wireless connectivity options:

- **Wi-Fi 6 (IEEE 802.11ax):** Connect to high-speed wireless networks. Supports 2x2 MU-MIMO for enhanced performance.
- **Bluetooth 5.1:** Pair with Bluetooth-enabled peripherals such as headsets, printers, or other devices.
- **GPS/A-GPS/GLONASS/Galileo/Beidou:** Utilize integrated GPS for location-based services and navigation.
- **WWAN (4G LTE):** Supports various LTE bands for cellular data connectivity.

4.5. Camera Usage

The RS36 is equipped with a 16MP PDAF rear camera with LED flash for capturing images and videos.

1. Open the camera application.
2. Frame your subject using the screen.
3. Tap the capture button to take a photo or start recording a video.

4.6. Interactive Sensors

The device includes several interactive sensors that enhance its functionality:

- **Light Sensor:** Automatically adjusts screen brightness based on ambient light.
- **Proximity Sensor:** Turns off the screen during calls when held near the ear.
- **Motion Sensors (Accelerometer, G-sensor, Gyroscope):** Enable automatic screen rotation and motion-based applications.
- **E-compass (Magnetometer):** Provides directional information.

5. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your CipherLab RS36.

5.1. Cleaning the Device

- Use a soft, lint-free cloth slightly dampened with water or a mild, non-abrasive cleaner to wipe the screen and casing.
- Do not use harsh chemicals, abrasive cleaners, or immerse the device in liquids.
- Ensure all ports and covers are closed before cleaning to maintain water and dust resistance.

5.2. Battery Care

- Avoid exposing the battery to extreme temperatures.
- Charge the battery regularly, but avoid leaving it fully discharged for extended periods.
- Utilize the hot-swap feature for seamless battery replacement during operation.

5.3. Software Updates

Regularly check for and install system updates to ensure your device has the latest features, security patches, and performance improvements. Updates are typically delivered over-the-air (OTA).

6. TROUBLESHOOTING

This section addresses common issues you might encounter with your CipherLab RS36.

Problem	Possible Cause	Solution
Device does not power on.	Battery is depleted or not properly installed.	Charge the battery. Ensure the battery is correctly inserted and latched.
Barcode scanner not working.	Scanning application not open, barcode damaged, or insufficient lighting.	Ensure the scanning application is active. Check barcode condition. Provide adequate lighting.
Wi-Fi/Bluetooth connectivity issues.	Out of range, incorrect settings, or interference.	Move closer to the access point/device. Verify Wi-Fi/Bluetooth settings. Restart the device.
Device is unresponsive.	Software glitch or application crash.	Perform a soft reset by holding the power button until the device restarts. If unresponsive, remove and reinsert the battery.

7. SPECIFICATIONS

The following table outlines the technical specifications of the CipherLab RS36 mobile computer.

RS36 /series

Performance	Operating System	Android 12 (GMS), upgradable to Android 14
	CPU	Qualcomm 4290 Octa-core 2GHz
	Memory	64GB UFS Flash / 4GB LPDDR4X RAM
	Expansion	Micro SD card slot with SDHC (up to 32GB) and SDXC (up to 2TB) support
	SIM	2 nano SIM/ 1 nano SIM and 1 eSIM (optional)
	Operating Power	Hot-swappable and rechargeable 3.85V, Li-ion 4000mAh , Extended battery: 6000mAh
	Working Hours[1]	12+ hours (standard battery), 18+ hours (extended battery)
	Alert	1 tri-color LED, 1 bi-color LED, vibrator
	Interface Supported	6-pin I/O & USB 3.1 Gen 1 Type-C with OTG
Wireless Communication	WWAN	EDGE/GPRS/GSM: 850/900/1800/1900 UMTS/HSPA+: B1/B2/B4/ B5/B6/B8 FDD LTE: B1/B2/B3/B4/B5/B7/B8/B12/B13/ B17/B19/B20/B25/B26/B28/B66 TDD-LTE: B38/39/40/41 Support VoLTE and Worldwide Band
	WLAN	IEEE 802.11 a/b/g/n/ac/d/h/i/r/k/v/w, IEEE 802.11ax (WI-FI 6 model only)
	Additional WLAN Features	802.11r (fast roaming), 802.11 v/k (Voice-Enterprise), MU-MIMO 2x2 (Wi-Fi 6 model only)
	WPAN	Bluetooth® Class II, V5.1 dual mode, V2.1 with Enhanced Data Rate (EDR)
	GPS	GPS/A-GPS/GLONASS/Galileo/Beidou
Data Capture	Barcode Scanning	1D/2D imager (Standard range: SE4770; Advanced range SE5500)
	RFID Read / Write	HF RFID 13.56 MHz frequency which supports ISO14443A, ISO14443B, ISO15693, and Felica Support NFC (Peer-to-Peer, Card Reader, Card Emulation)
	Camera	Rear :16 megapixels PDAF with LED flash / Front:5 megapixels[2]
Physical Characteristics	Display	5.5" HD+ 720 (W) x 1440 (H), Transmissive IPS LCD, outdoor visibility (630 nit), optically bonded Touch Panel
	Touch Panel	Corning® Gorilla® Cover Glass, Capacitive touch supports stylus, bare or gloved fingertip input multi-touch, allow water rejection and wet finger
	Interactive Sensor Technology	Light sensor, Proximity sensor, Motion sensor (Accelerometer, G-sensor), E-compass (Magnetometer), Gyroscope
	Keypad	1 programmable key, volume up and down keys, left and right trigger keys, power key
	Audio	Speaker (80 dB at 40 cm), microphones with echo and noise cancellation
	Size (LxWxH)	165 x 76.8 x 17.9 mm
	Weight	288 g (with battery)
User Environment	Operating Temperature	-20°C to 50°C / -4°F to 122°F
	Storage Temperature	-30°C to 70°C / -22°F to 158°F (without battery)
	Humidity (non-condensed)	Operating 10% to 90% / Storage 5% to 95%
	Impact Resistance	IP65 & IP68, 500 tumbles at 0.5 m Standard: 1.5 m (5 ft.) multiple drops onto concrete, 6 drops on each side With rubber boot: 1.8 m (6 ft.) multiple drops onto concrete, 6 drops on each side
	Electrostatic Discharge	± 15 kV air discharge, ± 8 kV contact discharge
	Regularity Compliance	LTE : CE, FCC, IC, NCC, TBL, JRL, BIS, WPC, WEEE, RoHS, REACH, CA65, TSCA, BC, NrCAN, NBTC WI-FI 6 ONLY : SRRC, CCC, BSMI, NCC, CE, FCC, IC, WEEE, RoHS, REACH, CA65, TSCA, BC, NrCAN
Development Support		Android 12.0 SDK, HTML 5 API, Reader API (Java/Xamarin)
Application Software		ReMoCloud, EnDeCloud, ADC, WMDS, APPLock, Terminal Emulator, BT Printer Mate, Device Health, SIP Controller, Software Trigger, Signature Capture, EZEdit, CipherLab Assistant Service, Ping Tool, Wireless Initiator, IntelliWorker, Reader Config, Button Assignment, HF RFID Config, EZConfig, Enterprise Setting, Barcode To Setting, LogGen, Agility Intelligence, Cloud Message, EZcheck
Certified Application		ReMoCloud, EnDeCloud, SOTI MobiControl, VMware Workspace ONE, Ivanti Wavelink Velocity
Accessories		Charging and communication cradle, USB snap-on cable, Hand strap, Rubber boot, Pistol grip,4-slot battery charger, Multi-slot Terminal charging cradle[2], UHF RFID reader[2], Screen protector[2]
Warranty		1 year standard warranty

1.Minimum hours under WLAN and 2D scanning per 20 seconds, LCD 50% backlight and speaker on (volume is default) at 25°C, RFID off / Bluetooth® off / IEEE 802.11 a/b/g/n/ac on. The test is based on one broadcasting packet per second. 2.Please contact us for availability.

ACCESSORIES

4-Slot Battery Charger	Charging and Communication Cradle	Snap-on Cable	Rubber Boot	Hand Strap

Shoulder Strap	UHF RFID Reader (work with standard battery only)	Pistol Grip (work with standard battery only)	5-Slot Terminal Charging Cradle	Battery Charger with Terminal Charging Cradle	Extended Battery

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Figure 7.1: Full Specifications. This image provides a comprehensive list of the CipherLab RS36's technical specifications, including operating system, CPU, memory, power, expansion, wireless capabilities, data capture, physical characteristics, and regulatory compliance.

Feature	Description
Operating System	Android 12 (GMS), upgradable to Android
CPU	Qualcomm 4290 Octa-core 2G
Memory	64GB UFS Flash / 4GB LPDDR4X RAM
Operating Power	Hot-swappable and rechargeable 3.85V, Li-ion 4000mAh (standard), 6000mAh (extended)
Expansion Slot	Micro SD card slot with SDHC (up to 32GB) and SDXC (up to 2TB) support
Working Hours	12+ hours (standard battery), 18+ hours (extended battery)
Alerts	1 tri-color LED, 1 bi-color LED, vibration
Interface Supported	6-pin I/O & USB 3.1 Gen 1 Type-C with OTG
SIM	2 nano SIM / 1 nano SIM and 1 eSIM
WWAN	EDGE/GPRS/GSM, UMTS/HSPA+, FDD LTE, TDD-LTE (Support VoLTE and Worldwide Band)
WLAN	IEEE 802.11 a/b/g/n/ac/d/h/i/r/k/v/w, IEEE 802.11ax (Wi-Fi 6 model only)
WPAN	Bluetooth Class II, V5.1 dual mode, V2.1 with EDR
GPS	GPS/A-GPS/GLONASS/Galileo/Beidou
RFID Read / Write	HF RFID 13.56 MHz (ISO14443A/B, ISO15693, Felica), NFC support
Display	5.5" HD+ (720 x 1440) IPS color display, sunlight readable
Touch Panel	Corning® Gorilla® Glass, capacitive touch, supports stylus, bare/wet/gloved fingers
Interactive Sensor	Light, Proximity, Motion (Accelerometer, G-sensor), E-compass (Magnetometer), Gyroscope
Camera	16MP PDAF rear camera with LED flash
Audio	Speaker (80 dB at 40 cm), microphones with echo and noise cancellation
Dimensions	6.5 x 3.02 x 0.7 inches
Weight	10.2 ounces
Operating Temperature	-20°C to 50°C / -4°F to 122°F
Storage Temperature	-30°C to 70°C / -22°F to 158°F (without battery)
Humidity (non-condensed)	Operating 10% to 90% / Storage 5% to 95%
Impact Resistance	IP65 & IP68, 500 tumbles at 0.5 m, 1.5 m (5 ft.) multiple drops onto concrete, 6 drops on each side
Electrostatic Discharge	± 15 kV air discharge, ± 8 kV contact discharge
Regulatory Compliance	CE, FCC, IC, NCC, TBL, JRL, BIS, WPC, WEEE, RoHS, REACH, CA65, TSCA, BC, NrCAN, NBTC (Wi-Fi 6 only: SRRC, CCC, BSMI)

8. WARRANTY INFORMATION

CipherLab products are typically covered by a limited warranty. For specific warranty terms and conditions applicable to your CipherLab RS36, please refer to the warranty card included with your product or visit the official CipherLab website. Retain your proof of purchase for warranty claims.
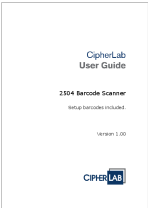
9. SUPPORT AND CONTACT

For technical support, service, or additional information regarding your CipherLab RS36, please contact CipherLab customer service or visit their official website. Support resources often include FAQs, driver downloads, and service request forms.
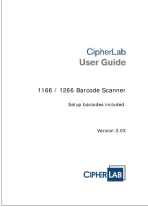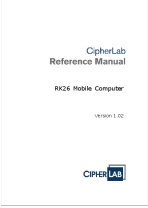
Manufacturer: CipherLab

Website: www.cipherlab.com (Please refer to the official website for the most current contact information and support resources.)

Related Documents - CipherLab RS36

	[RS35/36/38&RK26 UHF RFID Reader Quick Start Guide](#) A quick start guide for the RS35/36/38&RK26 UHF RFID Reader, detailing installation, removal, battery handling, and charging procedures. Includes LED indicator status and FCC compliance information.
	[CipherLab CP60 Rugged Mobile Computer: Technical Specifications and Features](#) Detailed specifications for the CipherLab CP60 rugged mobile computer, including its features, technical capabilities, environmental resistance, and connectivity options. Designed for demanding environments in logistics, warehousing, and field services.
	[CipherLab 2504 Barcode Scanner User Guide](#) Comprehensive user guide for the CipherLab 2504 Barcode Scanner, covering setup, operation, symbology settings, output formats, and specifications. Learn how to configure and utilize the scanner for various applications.

CipherLab 1166/1266 Barcode Scanner User Guide

Comprehensive user guide for CipherLab 1166 and 1266 barcode scanners, detailing setup, configuration, operation, interface options, symbology settings, and firmware upgrades. Includes important safety and regulatory information.

CipherLab 80x0/80x1 Series Portable Terminals User's Guide

Comprehensive user's guide for CipherLab 80x0/80x1 Series Portable Terminals, covering features, specifications, software architecture, operations, and troubleshooting. Includes details on electrical, environmental, physical characteristics, CPU, memory, readers, display, keypad, indicator, communication modules (Bluetooth, 802.11b), software, accessories, system architecture, operations, and troubleshooting steps.

CipherLab RK26 Mobile Computer Reference Manual

Comprehensive reference manual for the CipherLab RK26 Mobile Computer, covering setup, operation, safety, specifications, and troubleshooting for this industrial PDA.