

The Ultimate Performance for Enterprise Mobility

EF550 Rugged

Explosion-proof



Industry & Applications



- Retail – Store associates
 - Price/Inventory checks
 - Inventory management
 - BOPIS (Buy online, Pick up in store)
 - Loyalty management
 - Assisted selling
 - Voice communication
 - Electronic coupons
 - Store transfers
 - Gift registry lookup



- Retail – Store managers
 - Workforce management
 - Planogram management
 - Promotion compliance
 - Merchandising



- Field Service Technicians
 - Asset management
 - Invoicing



- T&L
 - Proof of Delivery



- Healthcare
 - Patient management, Staff communication



- Hospitality
 - Order taking



- Government/Public Safety
 - ID validation/Ticketing

BOS™ Solutions & Software

- BOS™ Provisioning; Staging; Kiosk; Virtual Key; Enterprise Keyboard
- BOS™ VoIP
- BOS™ PTT, PTT Essential
- BOS™ Wi-Fine™ (WiFi analyze application)
- BOS™ EMM
- BOS™ OTA
- BOS™ OEMConfig

3'rd Party Solutions Integration

- EMM: Airwatch, MobileIron, Mobicontrol, IBM Mass360, XenMobile
- PTT: ESChat, Zello, IMPTT, EveryTalk, AirPTT, RealTalk

EF550 Rugged offers enhanced innovative features and form factor that provide more huge value and productivity to enterprise frontline user environment. With the enhanced barcode scan engine and various features of the upgraded BOS™ solutions of integrated device management, EF550 Rugged is the device designed to maximize work efficiency. Experience the ultimate rugged and performance of the EF550 Rugged, a product of Bluebird's all cutting edge technology optimized for enterprise environment. Certified for hazardous locations, the EF550 Rugged offers ATEX and IECEx Zone 2/22 certification for use in potentially explosive atmospheres.

Key Features

BEST-IN-CLASS FEATURES AND POWERFUL PERFORMANCE

Ultimate Performance

With adopting Qualcomm Snapdragon® the best CPU for enterprise and Android 10; upgradeable to Android 14, EF550 Rugged makes workers do business faster and more securely, enhancing work efficiency. Users can quickly switch application screens thanks to the new Universal Flash Storage (UFS).

ATEX/IECEx Zone 2/22 Certification

EF550 Rugged is versatile and portable ATEX and IECEx certified mobile device in potentially explosive environments where rugged performance is required. Certified for hazardous locations, the EF550 Rugged offers ATEX/IECEx Zone 2/22 certification for use in potentially explosive atmospheres. The EF550 Rugged has been designed to deliver portable performance across a range of demanding industries such as Industrial manufacturing, Utilities and Oil and Gas.

Faster, Wider BUT Less Power

EF550 Rugged has 2x2 Multiple-User Multiple Input Multiple Output (MU-MIMO) technology that makes possible for multiple devices communicate with access points simultaneously through pinpoint beamforming, which leads to enhancement in Wi-Fi network speed, range, and capacity. And battery cycle increases as the access point is processed

Key Features

BEST-IN-CLASS FEATURES AND POWERFUL PERFORMANCE

Ultimate Rugged & Durability

Through Bluebird TankSmith® technology, EF550 Rugged is designed for the enterprise with the highest-in-class drop spec of 8 ft. (2.4m) and sealing up to IP68 to provide the ultimate durability and usability allowing use in environments exposed to water, humidity, or dust.

The Large Display

The large 5.45-inch display provides more quality information to the device users and at the same time, it enhances working condition with the best-in-class outdoor readability for users to read the screen even in bright sunlight

Power every minute of every workday

The standard battery provides power for a full shift. For longer shifts, an extended battery is available. (Standard battery :14 hours, Extended battery :19.8 hours)

Enhanced Data Capture

With the enhanced barcode module, high speed barcode scanning is available and even readable for damaged or contaminated barcode labels, supporting proximity scan and extended range scan to make it easy work

CONVENIENT CONNECTION & COMMUNICATION

Use your cradle to create a mobile-driven workstation

The cradle of EF551 Series can be connected to various workstations. You don't have to care about every single connections of them.

World Class RFID Reader Connection Available

The RFR900, a world-class handheld UHF RFID reader, and the next-generation model, RFR901, enable fast and safe operation. RFR900 can read 900 tags per second and RFR901 can read 1200 tags per second. If you connect Bluebird's adapter mount, Bluetooth, and NFC and use Wi-Fi-6e, you can reliably manage data on the reader connected to your mobile computer.

Location-Free Two-Way Communication

If you use BOS™ PTT, a subscription-type Push-to-Talk (PTT) express service, you can communicate regardless of location. BOS™ PTT helps you send and receive calls and messages over a WiFi network.

MANAGE YOUR WORK EFFICIENCY BY BOS™ OF BLUEBIRD

Easy application performance and data management

You can use the BOS SDK, a custom development tool for enterprise applications. This enables rapid application development and provides a custom toolkit that is fast, efficient, and optimized. You can also easily manage bar code data using the Data Wedge API.

Reliable Security system

LifeGuard™ for Android™ 2 can protect your devices safely. With Bos Kiosk, you can restrain apps and device features.

Manage your device easily

With Bluebird Zero-Touch, you can manage many devices just by scanning. BOS Wi-Fine manage Wi-Fi connection stable. Use Non-GMS OS Control to select Google Services. You can manage the device by BOS Dr.Device without repairing it.

Increase work efficiency with the device

With All-touch Terminal Emulation and Enterprise Keyboard, you can get the touchscreen & keyboard you need for managing data. BOS onescan can help you select the barcodes, and OCR can help you capture standardized data.



Specifications

PERFORMANCE CHARACTERISTICS

CPU	Qualcomm Snapdragon™ 660 octa-core, 2.2 GHz (Optional) Qualcomm Snapdragon™ 660 octa-core, 2.45 GHz
Operating System	Android 10; Upgradeable to Android 14
Memory	4GB RAM/ 32GB UFS Flash 8GB RAM/ 64 or 128GB UFS Flash (Optional-TBD)

PHYSICAL CHARACTERISTICS

Dimensions (L x W x D)	Rugged SKU 1 : 164.91 × 85.79 × 23.06 mm Rugged SKU 2 : 166.35 × 83.5 × 22.08 mm
Weight	332 g
Display	5.45" HD+ (1440×720), TFT-IPS
Imager Window	Corning® Gorilla® Glass
Touchpanel	Dual mode cpapcitive touch with stylus or bare or gloved fingertip input (Conductive stylus sold separately) Fingerprint resistant anti-smudge coating wter droplet rejection
Backlight	LED backlight
Power	Standard capacity 4350mAh / 3.85 V Extended capacity 6160mAh / 3.85 V
Hot swap	Supported
Expansion Slot	MicroSD 32GB SDHC, up to 512GB SDXC
SIM / SAM	(WWAN SKU Only) Hybrid Dual SIM Slot (2 Nano SIM or 1 Nano SIM/1 Micro SD) 2'nd Nano SIM is supported by micro SD Card Slot 2 SAM (Optional)
Interface	USB Type C Connector (USB 2.0) Docking Connector (Charging) Rear 10-pin Connector
Notification	Audible tone; multi-color LEDs; vibration
Keypad & Button	On-screen keypad and Enterprise Keyboard; power button; Volume up/down buttons; Home, Back, Menu; Dual-action side scan trigger
Voice and Audio	Dual noise-cancelling microphones; Vibrate alert; High-quality Dual speaker phone; 3.5mm headset jack; PTT headset support; Bluetooth wireless headset support, SWB & FB audio
PTT Hot Key	Support available dual-action side scan triggers

WIRELESS WAN DATA AND VOICE COMMUNICATIONS

Radio Frequency Band	(Optional) Worldwide - 4G : B1/B2/B3/B4/B5/B7/B8/B18/B19/B20/B26/B28 - 3G : B1/B2/B4/B5/B8/B9/B19 South Korea(SKT) - 4G : B1/B2/B3/B4/B5/B7/B8/B18/B19/B20/B26/B28 - 3G : B1/B2/B4/B5/B8/B9/B19 North America (AT&T, Verizon, T-Mobile) - 4G : B2/B4/B5/B12/B13/B14/B66/B71 - 3G : B2/B4/B5 China - 4G : B1/B3/B5/B8/B38/B39/B40/B41 - 3G : B1/B8 - 2G : B3/B8
GPS	WWAN SKU Only Autonomous, Concurrent GPS, GLONASS, Galileo, BeiDou, A-GPS

WIRELESS LAN

Radio	WiFi: IEEE 802.11 a/b/g/n/ac/d/h/i/r/k/v/w, Wi-Fi™ Certified; IPv4, IPv6, 2×2 MU-MIMO WWAN: IEEE 802.11 a/b/g/n/ac/d/h/i/r/k/v/w, Wi-Fi™ Certified; IPv4, IPv6, 5GHz 2×2 MU-MIMO
Data Rates	5GHz: 802.11a/n/ac — up to 866.7 Mbps; 2.4GHz: 802.11b/g/n — up to 300 Mbps
Security and Encryption	WEP (40 or 104 bit); WPA/WPA2 Personal (TKIP, and AES); WPA/WPA2 Enterprise (TKIP and AES); — EAP-TTLS (PAP, MSCHAP, MSCHAPv2); EAP-TLS, PEAPv0-MSCHAPv2, PEAPv1-EAP-GTC and LEAP, EAP-PWD Data in Motion : FIPS 140-2 Level 1 Date at Rest : FIPS 140-2 Level 1

WIRELESS PAN

Bluetooth	Bluetooth v5.0, BLE, Class 2
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WIRED LAN

Ethernet	Support (w/ Ethernet Cradle)
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* Android version is subject to change depending upon Qualcomm's roadmap.

* Please be informed that Bluebird warranty program should be purchased to get Android upgrade option.

Specifications (Continued)

COMMUNICATION AND MESSAGING

VoIP / PTT

DATA CAPTURE

Scanning

1D/2D Imager
Scan range (Code 39 barcode)
• 20 Mil : 2.0 inch to 30.0 inch (5.09 cm to 76.2 cm)
• 4 Mil : 3.3 inch to 8.8 inch (8.4 cm to 22.4 cm)
Digimarc support

Camera

Rear – 13 MP autofocus; f/2.0 aperture; flash LED, PDAF supports Torch mode

Front – 5MP fixed f/2.0 aperture

NFC

ISO 14443 Type A and B;
FeliCa and ISO 15693 cards;
P2P mode and Card Emulation via Host;
Card Emulation via Host and UICC

SENSOR

Light Sensor

Ambient Light
Automatically adjusts display backlight brightness

Other Sensors

Proximity, eCompass, accelerometer, Gyroscope, Pressure

USER ENVIRONMENT

Operating Temp

-20°C to 50°C / -4°F to 122°F

Storage Temp

-40°C to +70°C / -40°F to +158°F

Humidity

95% non-condensing

Drop Spec

Multiple 8ft./2.4 m drop to concrete at room temperature per MIL-STD 810H

Multiple 6ft./1.8 m drop to concrete across full operating temperature range

Tumble Spec

2000 3.2 ft./1.0 m tumbles; meets or exceeds IEC tumble specifications

Sealing

IP68 and IP65 per applicable IEC sealing specifications

Vibration

4 g's PK Sine (5 Hz to 2 kHz);
0.04g²/Hz Random (20 Hz to 2 kHz);
60 minute duration per axis, 3 axis

Thermal Shock

-40° C to 70° C / -40° F to 158° F rapid transition

Electrostatic Discharge (ESD)

+/-15kv air discharge
+/-8kV direct discharge
+/-8kV indirect discharge

SOFTWARE SOLUTIONS

BOS™

BOS™
-Provisioning;
-Staging;
-Kiosk;
-Virtual Key;
-Enterprise Keyboard;
-VoIP ; PTT ; PTT Express
-EMM;
-Wi-Fine (WiFi analyze application)
-Secure ID (Secure management solution)

3rd Party Solutions Integration

EMM : Airwatch, MobileIron, Mobicontrol, Mass360, XenMobile
PTT : ESChat, Zello, IMPTT, EveryTalk, AirPTT

ACCESSORIES

In-box

Battery / Handstrap & Stylus Holder

Additional

1 or 4 slot charging cradle
(Includes a bay for Spare Battery Charging)
1 or 4 slot ethernet cradle
(Includes a bay for Spare Battery Charging)
4~6 slot Battery Charger
Handstrap & Stylus Holder / Stylus
Soft Holder
Protective Film
Trigger Handle
UHF RFID Reader Sled (w / RFR90x)

EXPLOSION PROTECTION

ATEX

II 3G Ex ic op is IIC T5 Gc
II 3D Ex ic op is IIIB T100°C Dc IP64

IECEx

Ex ic op is IIC T5 Gc
Ex ic op is IIIB T100 °C Dc IP64

* Specifications are subject to change upon manufacturer's condition.



EF550 Rugged (Explosion-proof) 더 알아보기 >