

The Robust & Secure Mobile Point of Sales device

EF550 Pay



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; BOS™ 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

✓ The EF550 PAY is a reliable and robust mobile POS terminal with various payment certifications. Bluebird, which has an outstanding presence in the domestic market, has a variety of references for mobile payment terminals. EF550 Pay is for users who want Android Mobile Point of Sale Solution, ergonomic & integrated Mobile Point of Sales device or Complete Integrated Mobile Point of Sales product which integrates Payment Terminal & Mobile Computer two device solution.

Key Features

BEST-IN-CLASS FEATURES AND POWERFUL PERFORMANCE

Ultimate Performance

With adopting Qualcomm Snapdragon® 660 octa-core, the best CPU for enterprise and Android 10; upgradeable to Android 14, EF550 Pay 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).

Secure & Stable Payment device

EF550 Pay is a device for users who want secure payment solution. Users can use EF550 Pay for Mobile Point of Sales, Last Mile Parcel delivery payment, In-Store Payment and Line Busting without worrying about security.

Bluebird already has strong references in Korea major department stores, and has long & strong reference in Korea Payment market.

Faster, Wider BUT Less Power

EF550 Pay 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

Stable Rugged & Durability

Through Bluebird TankSmith® technology, EF550 Pay is designed for the enterprise with the high drop spec of 4 ft. (1.2m) and sealing up to IP68 to provide the durability and usability allowing use in environments exposed to water, humidity, or dust.

Power every minute of every workday

EF550 Pay's User-replaceable standard Battery is 3.85 V/4350mAh, and it provides power for nearly 17 hours.
(Standard battery :16.7 hours)

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.

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 EF550 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) Essential 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

BOS™ SecureCare for Android™ 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 Terminal Emulation and BOS™ 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 4GB RAM/ 64 or 128GB UFS Flash (Optional-TBD)

PHYSICAL CHARACTERISTICS

Dimensions (L x W x D)	183.38 × 79 × 32.35 mm
Weight	380.9 g
Display	5.45" HD+ (1440×720), TFT-IPS; Default : 400 nits Optional : 500 nits
Imager Window	Corning® Gorilla® Glass
Touchpanel	Dual mode capacitive touch with stylus or bare or gloved fingertip input (Conductive stylus sold separately) Fingerprint resistant anti-smudge coating water droplet rejection
Backlight	LED backlight
Power	User replaceable Battery, Li-Polymer, 3.85 V/4350mAh, 16.7Wh BOS™ PowerManager Station
Hot swap	Supported
Expansion Slot	User accessible MicroSD with 32GB SDHC, and 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 BOS™ 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 service.

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	Supported via Payment module
Biometrics	Face Recognition Solution (Optional-TBD)

Payment

MSR	Bi-directional, 3-track
Contact	EMV Level 1 and 2 type approved, ISO 7816, 3V, 5V
Contactless	EMV Contactless Level 1, MasterCard PayPass, Visa payWave, Amex Expresspay, Discover DPAS (TBD) All Types Supported - ISO 14443 A/B, Mifare, Etc
Security	Stonewall Security™ PCI PTS 6.X (TBD)

SENSOR

Light Sensor	Ambient Light Automatically adjusts display backlight brightness
Other Sensors	Proximity, eCompass, accelerometer. Gyroscope, Pressure

ACCESSORIES

In-box	Battery
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

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 4ft./1.2 m drop to tile over concrete over -10°C to 50°C (14°F to 122°F)
Tumble Spec	1000 1.6 ft./0.5 m tumbles; meets or exceeds IEC tumble specifications
Sealing	EF550 Mobile Computer : IP68 and IP65 per applicable IEC sealing specifications Payment Module : IP Specifications are not supported for the payment module
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 +/-8kc direct discharge +/-8kv indirect discharge

SOFTWARE SOLUTIONS

BOS™	BOS™ - Provisioning; - Staging; - Kiosk; - Virtual Key; - BOS™ Keyboard; - VoIP ; PTT ; PTT Essential - 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

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

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