A **TSC** Company
BLUEBIRD

The Ultimate Performance for Enterprise Mobility

EF551 Series

EF551   EF551 Rugged 1

WiFi CERTIFIED   **WiFi ALLIANCE**

Industry & Applications

Retail – Store associates
- Price/Inventory checks
- Item locator
- Line busting
- Assisted selling
- Task management
- Front of store replenishment
- Price management
- Inventory/cycle counts

Retail – Store managers
- Fleet Management
- Planogram management
- Promotion compliance
- Merchandising
- Back of store management

Field Service Technicians
- Asset management
- Staff Communication
- Invoicing

Postal Carriers/Courier Drivers
- Location services & Proof of Delivery
- Asset & Fleet management
- Packing & Staging & Invoicing
- Work Order Validation

Healthcare
- Staff ID & Outpatient & Pharmacy & Medication Administration
- Positive Patient ID
- Patient Bedside Care

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

Building on the success of Bluebird EF50x series, the all-new EF551 offers the larger display of 5.45″ with enhanced innovative features and form factor that provide more huge value to enterprise productivity and user environment. The various features of the upgraded BOS™ solutions boost ease of use in device management as another level in order to maximize work efficiency. Enjoy the EF551, a product of Bluebird's all cutting edge technology for the ultimate enterprise mobility performance.

Key Features

BEST-IN-CLASS FEATURES AND POWERFUL PERFORMANCE

Speed upgrade of another level
Increase the efficiency of your work by Qualcomm® 6490 octa-core processor, up to 8GB of RAM and 128GB of Flash, plus a 2TB MicroSD card slot. It also offers approximately three times the data processing speed of the EF50X series.

Fast and Stable Network
Experience fast business progress speed with Wi-Fi 6E & 5G. Even you are working in the large facilities, you can give fast and stable performance by CBRS private LTE networks .

5.45-inch display with best in class outdoor readability
EF551 Series are waterproof & dustproof, and their screen provides clear display view under the bright sunlight. Bluebird's multi-touch technology applies wet glove and stylus touch.

Robust & Slim Design
EF551 series has the improved durability and ergonomic design and which makes it thinner, larger & stronger. EF551 Rugged SKU works well if you drop it from a height of 2.4m / 7.8ft, and it still works after 2,000 times of dropping from a height of 1.0m / 3.2ft. It applied Gorilla Glass on the Touch Pannel and Imager.

Key Features

BEST-IN-CLASS FEATURES AND POWERFUL PERFORMANCE

Cutting edge Battery technology
Bluebird's BOS™ Power Manager standard 4350 mAh and extended 6160 mAh batteries offer great power supply and long device working hour.

Scan your data with 2 kind of scanning range
If you want to scan in standard range, you can use SE4710, SE4720 1D/2D scan engine. Meanwhile, you can use SE55 1D/2D scan engine for advanced scan range.

Useful & Compatible accessories of EF551
Accessories of EF551 Series are compatible with EF55X Series. Cradles support charging and Ethernet, and 4-slot cradle can support charging each of 4 devices. You can charge the device with RFID Reader on the cradle. Trigger handle for standard or extended battery will hep you scan easily. If you need to grab the device tightly, you may use the handstrap.

CONVENIENT CONNECTION & COMMUNICATION

Use your cradle to create a mobile-driven workstation
The cradle of EF551 Series can be connected to various worksations. 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 & keybord 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	2.7 GHz Octa Core Processor (QC6490)
Operating System	Android 12; Upgradeable to Android 16
Memory	4GB RAM/ 64GB UFS Flash 8GB RAM/ 128GB UFS Flash (Optional)

PHYSICAL CHARACTERISTICS

Dimensions (L x W x D)	159.9 × 79(grip : 77.6) x 16.65 mm 166.45 × 85.79 × 23.06 mm (Rugged SKU 1)
Weight	284.5 g 332 g (Ultra Rugged SKU)
Display	5.45″ FHD+ (2160×1080)
Imager Window	Corning® Gorilla® Glass 5
Touchpanel	Dual mode capacitive touch with stylus or bare or gloved fingertip input (conductive stylus sold separately); Fingerprint resistant antismudge coating water droplet rejection
Backlight	LED backlight
Power	Rechargeable Li-Polymer, BOS™ PowerManager for realtime battery management; Standard capacity : 3.85V / 4350 mAh, 16.7Watt hours Extended capacity : 3.85V / 6160 mAh, 23.7Watt hours Hot Swap battery mode(All SKUs) BOS™ PowerManager Station
Hot swap	Supported
Expansion Slot	User accessible MicroSD ; supports up to 2TB
SIM / SAM	WWAN SKU Only - 1 Nano SIM - 1 E-SIM - 2 SAM (Optional)
Interface	USB Type C Connector (USB 3.1) 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 triggers
Voice and Audio	Dual noise-cancelling microphones; Vibrate alert; High-quality speaker phone; PTT headset support; Bluetooth wireless headset support, SWB & FB audio USB-C Type audio support(WWAN SKU only) 3.5mm headset jack(WLAN SKU only)
PTT Hot Key	Support - Available dual-action side scan triggers

* 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.

WIRELESS WAN DATA AND VOICE COMMUNICATIONS

Radio Frequency Band	Worldwide - 5G FR1 : n1/2/3/5/7/8/12/13/14/20/25/26/28/29/38/40/41/48/66/71/77/78/79 - 4G : B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/38/39/40/41/42/43/48/66/71 - 3G : B1/B2/B4/B5/B8/B19 - 2G : 900/1800/850/1900
GPS	(for WWAN only) GPS, GLONASS, Galileo, BeiDou, QZSS Dual-Band GNSS -concurrent L1/G1/E1/B1 (GPS/QZSS, GLO, GAL, BeiDou) + L5/E5a/BDSB2a (GPS/QZSS, GAL, BeiDou); a-GPS; Supports XTRA

WIRELESS LAN

Radio	Wifi: IEEE 802.11 a/b/g/n/ac/d/h/i/r/k/v/w/mc/ax; 2×2 Mu-MIMO; Wi-Fi™ 6E (801.11ax) Wi-Fi™ certified; Wi-Fi™ 6E CERTIFIED IPv4, IPv6
Data Rates	6GHz: 802.11a/n/ac/ax (WIFI 6E) >160MHz — up to 2400 Mbps; 5GHz: 802.11a/n/ac/ax >20MHz, 40MHz, 80MHz — up to 1201 Mbps; 2.4GHz: 802.11b/g/n/ax4 >20MHz — up to 286.8 Mbps
Security and Encryption	WEP (40 or 104 bit); WPA/WPA2 Personal (TKIP, and AES); WPA3 Personal (SAE); WPA/WPA2 Enterprise (TKIP and AES); WPA3 Enterprise (AES) — EAP-TTLS (PAP, MSCHAP, MSCHAPv2); EAP-TLS, PEAPv0-MSCHAPv2, PEAPv1-EAP-GTC, LEAP and EAP-PWD; WPA3 Enterprise 192-bit mode (GCMP-256) — EAP-TLS; Enhanced Open (OWE)

WIRELESS PAN

Radio	Bluetooth v5.2, BLE

WIRED LAN

Ethernet	Support (w/ Ethernet Cradle - 1GHz)

Specifications (Continued)

COMMUNICATION AND MESSAGING

VoIP / PTT

DATA CAPTURE

Scanning	SE4720 1D/2D Scan Engine (Optional) SE4770 1D/2D Scan Engine SE55 Advanced Range 1D/2D Scan Engine
Camera	Rear – 13 MP AutoFocus; f/2.0 aperture; flash LED, PDAF supports Torch mode Front – 5 MP fixed f/2.0 aperture
NFC	ISO 14443 Type A and B; ISO 15693 and FeliCa cards; P2P mode and Card Emulation via Host; ECP1.0 and ECP2.0 polling support, Contactless payment support, Apple VAS certified (Optional) Innovatron NFC -ISO B' ; CEN TS 16794-2; RCTIF v5 -ISO 14443 Type A and B; F; Felica and ISO 15693 casrds; -P2P mode and Card Emulation via Host SAM

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 5 ft./1.5 m drop to concrete over -10° C to 50° C (14° F to 122° F) per MIL-STD 810H (Ultra Rugged SKU) Multiple 8 ft./2.4 m drop to concrete at room temperature per MIL-STD 810H Multiple 6 ft./1.8 m drop to concrete across full operating temperature range, EN 62262 (IKO6)
Tumble Spec	1000 1.6 ft./0.5 m tumbles, meets or exceeds IEC tumble specification 2000 3.2 ft./1.0 m tumbles; (Rugged SKU) 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)	+/-15kVdc air discharge +/-8kVdc direct discharge +/-8kVdc 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)
3'rd Party Solutions Integration	EMM : Airwatch, MobileIron, Mobicontrol, Mass360, XenMobile PTT : ESChat, Zello, IMPTT, EveryTalk, AirPTT

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