Ultimate Rugged Mobile Touch Computer

EF550R

BLUEBIRD

Ultimate Performance & Rugged Enterprise Mobile Computer

EF550R offers the larger display of 5.45" with 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, EF550R is the device designed to maximize work efficiency. Experience the ultimate rugged and performance of the EF550R, a product of Bluebird's all cutting edge technology optimized for enterprise environment.

OS Android 10.x with GMS	**Performance** Octa-Core Processor	**Wireless** Wifi, Bluetooth	**Battery** User Replaceable, Smart Battery	**Scanning** Enhanced 1D & 2D imager
Sealing IP68 & IP65	**Operation Temp** -20°C to 50°C -4°F to 122°F	**Camera** 13MP Autofocus with flash	**Display** 5.45" HD+ (1440x720)	**Drop Resistance** Multiple 8 ft./2.4m drop to concrete at room temperature per MIL-STD 810G

• Key Features

Ultimate Performance

With adopting Qualcomm Snapdragon®, the best CPU for enterprise and Android 10, EF550R 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).

Faster, Wider BUT Less Power

EF550R 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 access point is the one who processes not the device, increasing device battery cycle time

Ultimate Rugged & Durability

Through Bluebird TankSmith® technology, EF550R 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 Largest Display

The largest-in-class 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.

No worry, It's All-Day Battery

No need to worry about recharging while working! EF550R battery offers 14-hour power in serial use. Safe as it is a hard-pack and stable battery operation with support of BOS™ PowerManager. Hot Swap mode is available without running any application, ensuring task continuity without turning off the device or an application. You can minimize loss of data due to discharge.

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.

Business Optimized Solution

Bluebird BOS™ (Business Optimizing Solutions) provides various features optimized for use of enterprise device from app development, device deployment, to business performance management as an integrated solution system. With BOS™ you can implement integrated management for EF550R in an efficient way.

Industry & Applications

Retail – Store associates
- Price/Inventory checks and audits
- 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 / Last mile delivery

Healthcare
- Patient management, Staff communication

Manufacturing
- Order/Return processing
- Inventory management / Work order management

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

WiFi CERTIFIED WiFi ALLIANCE

Specifications

PERFORMANCE CHARACTERISTICS

CPU	2.2 GHz Octa Core Processor (SD660)
Operating System	Android 10.x with GMS - OS upgradable through Android 12 - Upgrading to new supported versions of Android requires the purchase of a Bluebird Care™ Service contract. Specifications are subject to change without notice.
Memory	4GB RAM / 32GB UFS Flash 4GB RAM / 64 or 128GB UFS Flash (Optional –TBD)

PHYSICAL CHARACTERISTICS

Dimensions (L x W x D)	166.45 x 85 x 18.6 mm
Weight	332g
Display	5.45" HD+ (1440 x 720), TFT-IPS
Imager Window	Corning® Gorilla® Glass
Touchpanel	Dual mode capacitive touch with stylus or bare or gloved fingertip input (conductive stylus sold separately); Fingerprint resistant antismudge coating water droplet rejection
Max Brightness	600 nit
Backlight	LED backlight
Power	User Replaceable Battery, Li-Polymer 3.85V / 4350 mAh, 16.7Wh BOS™ PowerManager Station
Hot swap	Hot Swap Mode
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) - 1 Nano SIM is supported by micro SD Card Slot 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	On-screen keypad and Enterprise 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; 3.5mm headset jack PTT headset support; Bluetooth wireless headset support, SWB & FB audio
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	(Optional) EMEA, Korea, Thailand, India - LTE FDD: B1/B3/B5/B7/B8/B20 - LTE TDD: B38/B40/B41 - WCDMA: B1/B5/B8 - GSM/EDGE : B3/B8 Latin America, Australia, ANZ, Taiwan - LTE FDD: B1/B2/B3/B4/B5/B7/B8/B28 - LTE TDD: B40 - WCDMA: B1/B2/B5/B8 - GSM/EDGE : B2/B3/B5/B8 Japan - LTE FDD: B1/B3/B8/B18/B19/B26 - LTE TDD: B41 - WCDMA: B1/B6/B8/B19 North America - LTE FDD: B2/B4/B5/B12/B13/B14/B66/B71 - WCDMA: B2/B4/B5 China - LTE FDD: B1/B3/B5/B8 - LTE TDD: B38/ B39/ B40/ B41 - WCDMA: B1/ B8 - GSM/EDGE : B3/ B8
GPS	(WWAN SKU only) Autonomous, Concurrent GPS; GLONASS; Galileo; BeiDou, and 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, 2x2 MU-MIMO WWAN: IEEE 802.11 a/b/g/n/ac/d/h/i/r/k/v/w; Wi-Fi™ certified; IPv4, IPv6, 5GHz 2x2 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 Data at Rest : FIPS 140-2 Level 1

WIRELESS PAN

Bluetooth	Bluetooth v5.0, BLE Class 2

WIRED LAN

Ethernet	Support (w/ Ethernet Cradle)

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 (5.08 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 – 5 MP 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
Motion Sensor	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 8 ft./2.4 m drop to concrete at room temperature per MIL-STD 810G
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)	+/-15kVdc air discharge +/-8kVdc direct discharge +/-8kVdc 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)
3'rd Party Solutions Integration	EMM : Airwatch, MobileIron, Mobicontrol, Mass360, XenMobile PTT : ESChat, Zello, IMPTT, EveryTalk, AirPTT

ACCESSORIES

Accessories	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 Flim Trigger Handle UHF RFID Reader Sled (w/ RFR90x)

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