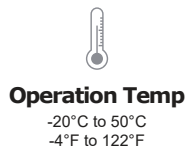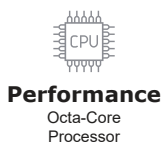## Ultimate Rugged Mobile Touch Computer
EF550R

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; upgradeable to Android 14	**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./2.4 m 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; upgradeable to Android 14, EF550R makes workers do business faster and moresecurely, 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 8ft. (2.4m) and sealing up to IP68 to provide the ultimate durability and usability allowing use inenvironments exposed to water, humidity, ordust.

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.

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: 16.7 hours, Extended battery: 23.7 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.

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 managem ent 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; 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

Specifications

PERFORMANCE CHARACTERISTICS

CPU	Qualcomm Snapdragon 660 octa-core, 2.2GHz 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 Flash (Optional)

PHYSICAL CHARACTERISTICS

Dimensions (L x W x D)	Rugged SKU 1: 166.45 x 85.79 x 23.06 mm Rugged SKU 2: 166.35 x 83.5 x 22.8 mm *Notes: 1) Rugged SKU 1: Rugged Bumper encompasses the entire device 2) Rugged SKU 2: Rugged Bumper is locatedon the top and bottom
Weight	332 g
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
Backlight	LED backlight
Power	Rechargeable Li- Polymer, BOS™ PowerManager for realtime battery management Standard capacity: 3.85V / 4350 mAh, 16.7 Watt hours Extended Battery: 3.85V / 6160 mAh, 23.7 Watt hours BOS™ PowerManager Station
Hot swap	Supported
Expansion Slot	User accessible MicroSD 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) - 1 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	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; 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 VOICECOMMUNICATIONS

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, 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)

* 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.

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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 cmto 76.2 cm) - 4 Mil: 3.3 inch to 8.8 inch (8.4 cm to22.4 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. 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 to122°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 Multiple 6 ft./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 specification
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

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.