BLUEBIRD

Ultimate Rugged Mobile Touch Computer

EF551R

Ultimate Performance & Rugged Enterprise Mobile Computer

EF551R 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, EF551R is the device designed to maximize work efficiency. Experience the ultimate rugged and performance of the EF551R, a product of Bluebird's all cutting edge technology optimized for enterprise environment. It is also the first device in Korea to support 5G mobile communication specialized network(ea eum 5G).

OS Android 12; Upgradeable to Android 15	**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" FHD+ (2160x1080)	**Drop Resistance** Multiple 8 ft./2.4m drop to concrete at room temperature per MIL-STD 810H

• Key Features

Ultimate Performance
With adopting Qualcomm Snapdragon® , the best CPU for enterprise and Android 12; upgradeable to Android 15, EF551R 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
EF551R 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 net work speed, range, and capacity. And battery life increases as the access point is processed.

Ultimate Rugged & Durability
Through Bluebird TankSmith® technology, EF551R 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.

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.

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 EF551R 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	Qualcomm 6490 Octa Core, 2.7GHz
Operating System	Android 12; Upgradeable to Android 15
Memory	4GB RAM / 64GB UFS Flash 8GB RAM / 64GB UFS Flash 8GB RAM / 128GB UFS Flash

PHYSICAL CHARACTERISTICS	
Dimensions (L x W x D)	164.91 x 85.79 (Grip : 77.6) x 23.06 mm
Weight	332g
Display	5.45" FHD+ (2160x1080)
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 anti-smudge coating water droplet rejection
Backlight	LED backlight
Power	User Replaceable Battery, Li-Polymer 3.85V / 4350mAh, 16.7Wh User Replaceable Battery, Li-Polymer 3.85V / 6160mAh, 23.71Wh BOS™ PowerManager Station
Hot swap	Hot Swap Mode
Expansion Slot	MicroSD 32GB SDHC, up to 512GB SDXC
SIM / SAM	Hybrid Dual SIM Slot (2 Nano SIM or 1 Nano SIM/1 Micro SD) - 2 Nano SIM is supported by micro SD Card Supports 2 SAM (Optional) eSIM (Optional)
Interface	USB Type C Connector (USB 3.1) Docking Connector (Charging)
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; USB-C Type 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	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 : B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/29/ 30/34/38/39/40/41/42/43/48/66/71 3G : B1/2/3/4/5/8/19 2G : 850/900/1800/1900
GPS	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	IEEE 802.11 a/b/g/n/ac/d/h/i/r/k/v/w/mc/ax; 2x2 Mu-MIMO; Wi-Fi™ certified; Wi-Fi™ 6E Certified; Dual Band Simultaneous; 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 286.8Mbps
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

WIRED LAN	
Bluetooth	Bluetooth v5.2; Bluetooth Low Energy

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.

Specifications (Continued)

DATA CAPTURE

Scanning	SE4710 1D/2D Scan Engine SE4720 / SE4770 1D/2D Scan Engine SE55 Advanced Range Scan Engine with IntelliFocus™ technology;
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
Sensor	Proximity, 3-axis accelerometer , eCompass, Pressure, Gyro

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 810H
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) - Remote Battery Management
3'rd Party Solutions Integration	EMM : Airwatch, MobileIron, Mobicontrol, Mass360, XenMobile PTT : ESChat, Zello, IMPTT, EveryTalk, AirPTT

ACCESSORIES

Accessories	Direct Charger (5V/3A) Direct Charger (Fast charging) USB C Cable 3.1 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 Slot Battery Charger Handstrap & Stylus Holder / Stylus Soft Holder & Shoulder Strap Protective Flim Trigger Handle UHF RFID Reader Sled (w/ RFR90x) Holster

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