A TSC Company
BLUEBIRD

The Ultimate Performance for Enterprise Mobility based on 5G

S50

Spread Your Wings

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
- Invoicing & Asset management
-Staff Communication

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

Public Official
-eCitation & Situational awareness
-Communication and Collaboration
-Parking & Traffic Law Enforcement
-Identification Authentication
-Patrol Mobile Solution

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

Meet the all-new next generation device, Bluebird's S50 to experience brilliant specifications, which is the another level upgrade of the previous Bluebird device features. S50 has the best battery capacity of the grade, and the design of blue buttons on the sides of device makes it to be more visible, and various cutting edge technologies are in the device - camera, PTT key, display, etc.

Key Features

BEST-IN-CLASS FEATURES AND POWERFUL PERFORMANCE

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 .

Robust & Slim Design

S50 has the improved durability and ergonomic design which makes it thinner, larger and stronger. If you drop it from a height of 1.5m / 5ft, or drop it 1,000 times from a height of 0.5m / 1.6ft, and it still works. It applied Gorilla Glass on the Touch Pannel and Imager.

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.

6-inch display with best in class outdoor readability

S50 is waterproof & dustproof, and their screen provides clear display view under the bright sunlight. Bluebird's multi-touch technology applies glove and stylus touch.

Key Features

BEST-IN-CLASS FEATURES AND POWERFUL PERFORMANCE

Cutting edge Battery technology

Bluebird's BOS™ Power Manager standard 5000 mAh and extended 7000 mAh batteries offer great power supply and long device working hour. S50 has the best battery capacity of the grade.

Scan your data with 2 kind of scanning range

If you want to scan in standard range, you can use SE4720/SE4770 1D/2D scan engine. Meanwhile, you can use SE55 1D/2D scan engine for advanced scan range.

High Solution Camera

Experience a 16 MP integrated camera that delivers high-quality pictures with remarkable clarity.

Supportive microphone and speaker

3 microphones and 2 speakers improve your communication with co-workers.

CONVENIENT CONNECTION & COMMUNICATION

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.

Simply check your boxes by pressing a button

S50 supports Time of Flight(ToF) sensor to check parcel dimensions quickly and easily to save your working time.

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.

MANAGE YOUR WORK EFFICIENCY BY BOS™ OF Bluebird

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.

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.

Simply find your lost device

You can find lost device easily & fast with BOS Device Tracker, even the battery is discharged or off.

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	Qualcomm Snapdragon™ QC6490 octa-core, 2.7 GHz
Operating System	Android 12; Upgradeable to Android 16
Memory	6GB RAM/ 64GB UFS Flash 8GB RAM/ 128GB UFS Flash (Optional)

PHYSICAL CHARACTERISTICS

Dimensions (L x W x D)	166.8 × 78.3 (Grip: 77.34) x 16.71 mm
Weight	290 g with standard battery
Display	6″ FHD+ (1080×2160), LED back-light
Imager Window	Corning® Gorilla® Glass 5
Touchpanel	Multi-mode capacitive touch with bare or gloved fingertip input or conductive stylus (sold separately), Corning Gorilla Glass; water droplet rejection; fingerprint resistant anti-smudge coating
Backlight	LED backlight
Power	Rechargeable Li-Polymer, BOS™ PowerManager for realtime battery management Standard capacity 5000mAh / 19.25 Watt hours; Extended capacity 7000mAh / 26.95 Watt hours; *Fast charging & Hot Swap battery mode (All SKUs) (Optional) BLE Beacon Battery 5000mAh Qi compatible Wireless charging battery 5000mAh
Hot swap	Supported
Expansion Slot	User accessible MicroSD ; supports up to 2TB
SIM / SAM	WWAN SKU Only : 1 Nano SIM ; 1 eSIM
Interface	Rear : 8-pin communication connector Bottom : USB-C 3.1 OTG w/DP mode 2-pin Charging Connector
Notification	Audible tone; multi-color LEDs; Scan LED; vibration; Haptick Feedback
Keypad & Button	On-screen keypad and BOS™ Keyboard power button; Volume up/down buttons; Dual-action side scan buttons; Dedicated PTT Button; button of trigger handle via Back I/O.
Voice and Audio	Three microphones with noise-cancellation; Vibrate alert; High-quality Dual speaker phone; PTT headset USB-C Type support; Bluetooth wireless headset support, SWB & FB audio cellular circuit switch voice; HD voice ; 3.5 mm audio jack only on WLAN SKUs
PTT Hot Key	Support Dedicated PTT Button

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 Supports private networking (LTE/5G) Support CBRS (US B48, Private LTE) Support 5G mmWave n257/258/260/261 (Optional)
GPS	(Only on WWAN SKUs) 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; 2×2 Mu-MIMO; Wi-Fi™ 6E (801.11ax); Wi-Fi certified; Wi-Fi™ 6E Certified; Dual Band Simultaneous; IPv4, IPv6
Data Rates	6GHz: 802.11ax - 20MHz, 40MHz, 80MHz, 160MHz — up to 2402 Mbps; 5GHz: 802.11a/n/ac/ax — 20MHz, 40MHz, 80MHz, 160MHz — up to 2402 Mbps; 2.4GHz: 802.11b/g/n/ax — 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, EAP-PWD; WWAN models only — EAP-SIM, EAP-AKA; WPA3 Enterprise 192-bit mode (GCMP 256) — EAP-TLS; Enhanced Open (OWE)

WIRELESS PAN

Bluetooth	Class 2, Bluetooth v5.2 and Secondary BLE for beaconing within BLE battery

WIRED LAN

Ethernet	Support (w/ Ethernet Cradle - 1GHz)

* 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	SE4720 1D/2D Scan Engine SE4770 1D/2D Scan Engine (Optional) SE55 1D/2D Advanced Range Scan Engine (Optional)
Camera	Rear – 16 MP AutoFocus; flash LED, PDAF, Torch mode+HDR; better low light performance Time of Flight (ToF) Sensor (Optional) Front – 8MP Fixed focus (Optional) Rear : 50 MP autofocus; flash LED, PDAF; Torch mode+HDR; better low light performance
NFC	ISO 14443 Type A and B; FeliCa and ISO 15693 cards; Card Emulation via Host; Contactless payment support, (Optional) ECP1.0 and ECP2.0 polling support, Apple VAS certified

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	5% to 95% non-condensing
Drop Spec	Multiple 5 ft./1.5 m drop to tile over concrete (-10° C to 50° C /14° F to 122° F) per MIL-STD 810H Multiple 8 ft./2.4 m drop to concrete over operating temp.(-20° C to 50° C /-4° F to 122° F) with protective boot per MIL-STD 810H
Tumble Spec	1000 1.6 ft./0.5 m tumbles, meets or exceeds IEC tumble specification 1000 3.2 ft./1.0 m tumbles at room temperature with protective boot, meets or exceeds IEC tumble specification
Sealing	IP68 and IP65 with battery 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)	+/-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)
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.

Scan to learn more about S50 >