Datasheet

_NETSelekt.pl

A TSC Company BLUEBIRD

The accessible, rugged device for Enterprise Mobility based on 5G

# S20




## 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

**Entertainment / Restaurant Workers**
-Staff Communication
-Access & Asset & Staff ID & Counter / Front Task Managemet
-Loyalty, Membership & Gift Cards
-Security & Validating Tickets

## 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 S20 to experience brilliant specifications, light weight and brand new OS. The OS of S20 is Android 13, and it is upgreadable to Android 17, which is the latest Android version ever before. Due to the slim, light and ergonomic design of S20, it is easier to grip and suits almost every hand sizes than other devices. S20 is for users who search for compact device with reasonable price.

# 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

S20 has the improved durability and ergonomic design and which makes it thinner, larger & stronger. If you drop it from a height of 1.5m / 5ft, or drop it 550 times from a height of 0.5m / 1.6ft, 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® 4490 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

S20 is waterproof & dustproof, and the screen provides clear display view under the bright sunlight. Bluebird's multi-touch technology applies glove and stylus touch.

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# Key Features

## BEST-IN-CLASS FEATURES AND POWERFUL PERFORMANCE

### Cutting edge Battery technology

Bluebird's BOS™ Power Manager standard 4000 mAh and extended 6000 mAh batteries offer great power supply and long device working hour.

### High Solution Camera

Experience 16 MP autofocus integrated camera with flash LED. You can see the pictures at great quality.

### Scan your data with 2 kind of scanning range

If you want to scan in standard range, you can use SE4710/SE4100/4720 1D/2D scan engine or SE55 1D/2D scan engine for advanced scan range.

### Supportive microphone and speaker

2 microphones and 1 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

S20 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.

### 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™ QC4490 octa-core, 2.4 GHz |
| Operating System | Android 13;<br>Upgradeable to Android 17 |
| Memory | 6GB RAM/ 64GB UFS Flash<br>8GB RAM/ 128GB UFS Flash (Optional) |

## PHYSICAL CHARACTERISTICS

| | |
|---|---|
| Dimensions (L x W x D) | 165 × 76.9 × 12.5 mm (with standard battery)<br>165 × 76.9 × 20 mm (with extended battery) |
| Weight | 243 g (248.5 g with extended battery) |
| Display | 6″ FHD+ (1080×2160), NIT : 400 |
| 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<br>Standard capacity 4000mAh / 15.4 Watt hours;<br>Extended capacity 6000mAh / 23.1 Watt hours;<br><br>(Optional)<br>Hot Swap battery mode<br>BLE Beacon Battery 4000mAh |
| 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<br>Bottom : USB-C 3.1 OTG w/DP mode<br>2-pin Charging Connector |
| Notification | Audible tone; multi-color LEDs; Scan LED; vibration; Haptick Feedback, multi-color LEDs (Top) |
| 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.; Top alert Button |
| Voice and Audio | Dual noise-cancelling microphones; Vibrate alert; High-quality Dual speaker phone(100dB); PTT headset USB-C Type support; Bluetooth wireless headset support, SWB & FB audio cellular circuit switch voice; HD voice |
| PTT Hot Key | Support Dedicated PTT Button |

* 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 | Rest of World<br>- 5G FR1 :<br>n1/3/5/7/8/20/26/28/38/39/40/41/48/77/78/79<br>- 4G :<br>B1/3/5/7/8/18/19/20/26/28/34/38/39/40/41/42/43/48<br>- 3G : B1/3/5/8/9/19<br>- 2G : 900/1800/850/1900<br><br>America(NA+SA)<br>- 5G FR1 :<br>n2/5/7/12/13/14/25/26/28/29/38/41/48/66/71/77/78/79<br>- 4G :<br>B2/4/5/7/8/12/13/14/17/25/26/28/29/38/41/42/43/48/66/71<br>- 3G : B2/4/5/8<br>- 2G : 900/1800/850/1900 |
| GPS | (Only on WWAN SKUs)<br>GPS, GLONASS, Galileo, BeiDou, QZSS Dual-Band GNSS(Optional)<br>GPS, GLONASS, Galileo, BeiDou, QZSS Dual-Band GNSS<br>- 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);<br>Wi-Fi certified;<br>Wi-Fi™ 6E Certified;<br>Dual Band Simultaneous;<br>IPv4, IPv6 |
| Data Rates | 6GHz: 802.11ax - 20MHz, 40MHz, 80MHz, 160MHz — up to 2402 Mbps;<br>5GHz: 802.11a/n/ac/ax — 20MHz, 40MHz, 80MHz, 160MHz — up to 2402 Mbps;<br>2.4GHz: 802.11b/g/n/ax — 20MHz up to 286.8 Mbps |
| Security and Encryption | WEP (40 or 104 bit); Enhanced Open (OWE); 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; WPA3 Enterprise 192-bit mode (GCMP256) - EAP-TLS; WWAN models only: WPA3 Enterprise EAPSIM, EAP-AKA. EAP-AKA Prime |

## WIRELESS PAN

| | |
|---|---|
| Bluetooth | Class 2, Bluetooth v5.3 and Secondary BLE for beaconing within BLE battery |

## WIRED LAN

| | |
|---|---|
| Ethernet | Support (w/ Ethernet Cradle - 1GHz) |

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# Specifications (Continued)

## COMMUNICATION AND MESSAGING

| | |
|---|---|
| - | |

## DATA CAPTURE

| | |
|---|---|
| Scanning | (Default)<br>SE4710 1D/2D Scan Engine<br><br>(Optional)<br>SE4100<br>SE4720 (White Illumination, Green Aimer)<br>SE55 1D/2D Advanced Range Scan Engine |
| Camera | Rear – 16 MP AutoFocus; flash LED, PDAF, Torch mode+HDR; better low light performance;<br><br>Front – 8MP fixed<br>5MP fixed (Optional)<br><br>AR Core Certification |
| NFC | ISO 14443 Type A and B;<br>FeliCa and ISO 15693 cards;<br>Card Emulation via Host;<br>Contactless payment support,<br><br>(Optional)<br>ECP1.0 and ECP2.0 polling support,<br>Apple VAS certified |

## SENSOR

| | |
|---|---|
| Light Sensor | Ambient Light<br>Automatically adjusts display backlight brightness |
| Other Sensors | Proximity, accelerometer. Gyroscope,<br>Pressure(WWAN only)<br>eCompass (not available in the base LAN model) |

## USER ENVIRONMENT

| | |
|---|---|
| Operating Temp | -20°C to 62°C / -4°F to 143.6°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 drops to tile over concrete across operating temp (-10°C to 50°C/14°F to 122°F)per MIL-STD 810H<br><br>Multiple 5.25 ft./1.6 m drops to concrete over operating temp (-10°C to 50°C/14°F to 122°F) with protective boot per MIL-STD 810H |
| Tumble Spec | 550 1.6 ft./0.5 m tumbles<br><br>(Rugged boot)<br>550 3.3 ft./1.0 m tumbles optional protective boot |
| Sealing | IP68 and IP65, with battery per applicable IEC sealing specifications |
| Vibration | 4 g's PK Sine (5 Hz to 2 kHz);<br>0.04g2/Hz Random (20 Hz to 2 kHz);<br>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<br>+/-8kc direct discharge<br>+/-8kv indirect discharge |

## SOFTWARE SOLUTIONS

| | |
|---|---|
| BOS™ | BOS™<br>-Provisioning;<br>-Staging;<br>-Kiosk;<br>-Virtual Key;<br>-BOS™ Keyboard;<br>-VoIP ; PTT ; PTT Essential<br>-EMM;<br>-Wi-Fine (WIFI analyze application)<br>-Secure ID (Secure management solution) |
| 3'rd Party Solutions Integration | EMM : Airwatch, MobileIron, Mobicontrol, Mass360, XenMobile<br>PTT : ESChat, Zello, IMPTT, EveryTalk, AirPTT |

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

Scan to learn more about S20 >

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