

UHF | RAIN - Mobile Label Barcode Printer TSC - Alpha-40L RFID

- RAIN UHF compliant (GS1 EPC Gen2 v2/ ISO 18000-63)
- Supports multiple brand RFID inlays and chips
- Industry-leading automatic RFID label calibration
- Overstrikes RFID labels not encoded successfully
- IP54-rated for dust and water resistance



UHF | RAIN - Mobile Printer Reliable RFID Labeling Solution

The Alpha-40L RFID mobile printer complements the prestigious TSC Auto ID stationary RFID product line, giving resellers and end users coverage for multiple applications across various industries. The Alpha-40L RFID is RAIN UHF compliant, user-friendly, heavy-duty and drop-resistant, supporting next generation smart, RFID-enabled solutions for printing and encoding RFID labels in advanced track and trace applications to boost productivity.

The Alpha-40L RFID supports versatile media types, including standard receipts and labels, as well as encoding RFID labels for a smarter and faster solution, when and where you need them. This innovative mobile RFID printer has an auto-calibration function that is simple and easy to use. Users can start printing and encoding RFID labels without the assistance of complicated user manuals, guides or separate software utilities.

With the Apple-certified MFi Bluetooth® 5.0 connection and 802.11 a/b/g/n/ac Wi-Fi fast roaming features, the Alpha-40L RFID not only provides reliable and seamless communication with users' devices, but also securely prints labels wherever they are needed.

The impressive Alpha-40L RFID mobile printer complements industrial models by providing a more convenient option to print and encode RFID labels anytime, anywhere in challenging environments. The new mobile RFID printer provides a full line of accessories to assist in performing diverse labeling tasks while on the go. A high-capacity smart battery paired with SOTI Connect IoT management tool or TSC Console remote printer management system enables you to work confidently all day, while it continuously monitors battery power consumption and performance.

Common Applications

- Retail
- Transportation & Logistics
- Healthcare
- Manufacturing & Construction
- Food & Beverage



TECHNICAL SPECIFICATIONS

Specifications

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|----------------------------|---|
| Resolution | 8 dots/mm (203 dpi) |
| Printing Method | Direct Thermal |
| Max. Print Speed | 6 GB RAM / 128 GB UFS 2.2 |
| Max. Print Width | Up to 127mm (5")/second |
| Max. Print Length | 2,794mm (110") |
| Enclosure | Plastic with rubber over molded |
| Physical Dimension | 160mm (W) x 191mm (H) x 79mm (D) |
| Weight (Including Battery) | 1,025g (2.26lbs) |
| Drop Specification | 1.8m (6ft), with protective case can be 2.5m (8.2ft) |
| IP Rating | IP54 (without case, paper path is excluded) |
| Max. Roll Capacity | 67mm (2.64") OD |
| Processor | 32-bit RISC CPU |
| Memory | Standard: 128 MB SDRAM, 128 MB Flash, microSD card reader for Flash memory expansion, up to 32 GB Factory Option: 256 MB SDRAM, 512 MB Flash, microSD card reader for Flash memory expansion, up to 32 GB |
| Interface | Either one selected - Type C USB 2.0 + MFi Bluetooth 5.0 + Passive NFC tag - Type C USB 2.0 + 802.11 a/b/g/n/ac with Bluetooth 5.0 + Passive NFC tag * Type C is for communication only |
| Power | 7.4V DC, 6,200mAh Li-ion rechargeable smart battery |
| Operation Switch, Button | 7 buttons (Power, Feed/Pause, Menu, Navigation keys) |
| User Interface | 2 LED indicators (battery charging status, printer status) 2.3" color LCD display, 320 x 240 pixels |
| Sensors | Reflective sensor, Head open sensor, Transmissive sensor |
| Real Time Clock | Standard |
| Internal Fonts | 8 alpha-numeric bitmap fonts, Monotype Imaging® true type font engine with one CG Triumvirate Bold Condensed scalable font |
| Barcode | 1D barcode Code128UCC, Code128 subsets A, B, C, EAN128, Interleaved 2 of 5, Interleaved 2 of 5 with check digit, Standard 2 of 5, Industrial 2 of 5, Code39, Code39 with check digit, Code93, EAN13, EAN8, UPCA, UPCE, EAN and UPC 2 (5) digits add-on, Codabar, Postnet, MSI, MSI with check digit, PLESSEY, Barcode China post, ITF14, EAN14, Code11, TELEPEN, TELEPEN number, PLANET, Code49, Deutsche Post Identcode, Deutsche Post Leitcode, LOGMARS, 2D barcode CODABLOCK F mode, GS1 DataBar, GS1 DataMatrix, Maxicode, AZTEC, PDF417, QR Code, Micro PDF417, TLC39 |
| Printer Language | Print: TSPL-EZC (EPL2, ZPL2, CPCL), or ESC-POS, RFID: TSPL, ZPL2 |
| RFID | RAIN UHF Passive (GS1 EPC Gen2 v2 / ISO 18000-63) Fixed Position Antenna Minimum Label/Tag Pitch 0.625" (15.9mm) Counters: Tracks good/overstruck labels/tags |
| Media Type | Die-cut, black mark, receipt, fan-fold, continuous (outside wound) |
| Media Width | 50.8mm - 112mm (2" - 4.4") with liner |

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| Media Thickness | 0.06mm - 0.16mm (0.002" - 0.06") |
| Media Height | 15.9mm - 2,794mm (0.625" - 110") |
| Media Core Diameter | 25.4mm (1") *19.1mm (0.75") (with adaptors included with printer) *38.1mm (1.5") (with adaptors included with printer) |
| Environment Condition | Operation: -20 °C - 50 °C (-4°F - 122 °F), 10% - 90% non-condensing Storage: -30 °C - 70 °C (-22°F - 158 °F), 10% - 90% non-condensing Charging: 0 °C - 40 °C (32°F - 104 °F), 10% - 90% non-condensing |
| Environmental Concern | Comply with RoHS, WEEE, REACH, China RoHS |
| Accessories | Quick start guide, Li-ion battery, Belt clip, Power adaptor, Media core adaptors |
| Limited Warranty | Printer: 2 years, Platen: 50km (2 million inches) or 12 months Limited Warranty, Print head: 25km (1 million inches) or 12 months which comes first, Battery: 1 year |
| Factory Options | Media sensor position (default center, right, or left side) |