



Alpha-30R Mobile Barcode Printer

Empower Your Mobile Workforce Efficiency and Accuracy

The new generation TSC mobile printer, the Alpha-30R, is user-friendly and drop-resistant. It enhances customer service, boosts productivity and improves shopper experience in retail stores. The Alpha-30R is stylish and comfortable in use and prints receipts or labels on-demand. Mobile printing operations can be carried out much faster and with more accuracy.

The Alpha-30R is compact and very efficient, it also has a large capacity smart battery that enables it to carry out a full shift of work without interruption. The Apple-certified MFi Bluetooth® 5.0 connection and 802.11ac Wi-Fi fast roaming features allow the Alpha-30R to provide reliable and seamless communication with user devices to achieve optimal mobile field-work.

The Alpha-30R's smart battery paired with SOTI Connect and TSC Console remote printer management gives real-time visibility that helps enterprises scale their business activities seamlessly and efficiently.

The Alpha-30R design emphasizes durability, it has the most robust specifications in its class. The ruggedness of the Alpha-30R meets MIL-STD-810 military-grade standards for drop and vehicle vibrations. It has an IP54 rating and will withstand a 2.1 m drop and a 1.0 m tumble. While the protective case allows it to withstand a 2.5 m drop in a harsh environment.

The Alpha-30R has a full line of accessories to meet a range of different environments on the go. It is especially suited for retail applications. It is also environmentally friendly and can support linerless media printing to reduce waste. Go green!

Key Features



Sophisticated TSC Sense Care

- Auto scans and detects printhead bad dots during printing
- Monitors the smart battery to ensure full-shift productivity, reduces total cost of ownership and avoids downtime



Seamless Mobility Communication

- MFi Bluetooth® 5.0 with NFC tap-to-pair setup enables easy connectivity
- Dual-band Wi-Fi with fast roaming as well as enterprise-grade security ensures reliable and safe operation



Full Line of Accessories

- Assist in performing diverse labeling tasks including hands-free mobility
- Fulfills linerless printing needs



Dynamic Remote Printer Management

- SOTI Connect and TSC Console support multiple management tasks. This reduces costs and avoids downtime of business-critical devices



Industry-specific Durability Standards

- IP54 rating for dust and water resistance
- Rugged design for drops from 2.1 m and tumbles from 1.0 m



Integrated Software Pack

- Supports label printing applications for different platforms
- TSC mobile printing app is available for both iOS and Android™ users

Applications



Retail

- Chain stores shelf labeling
- Super market relabeling
- Food delivery



Transportation and Logistics

- Shipping and receiving
- Direct store delivery



Healthcare

- Mobile specimen collection
- Drug management
- Asset label



Manufacturing

- Raw materials, finished goods
- Asset management

Mobile Printing For Your Business

Key Benefits



Faster and Rugged Design for On the Go Printing

The innovatively designed Alpha-30R features two models with different print speeds. The basic model offers up to 5 ips, while the premium model goes up to 6 ips to enhance field worker productivity. They are built for durability, and the Alpha-30R is IP54 rated for dust and water resistance. It has been rigorously tested to withstand a 2.1 m drop and an 800 drops tumble. When used with a protective case, the ruggedness level is improved and the printer will withstand a 2.5 m drop. The Alpha-30R meets MIL-STD-810 military standards for drop and vehicle vibration as proof of the rugged design for all your field mobility solutions.



Easy Remote Printer Management with SOTI Connect and TSC Console

Quickly and remotely monitor a fleet of Alpha-30R mobile printers, configure settings, deploy programs, and troubleshoot problems using SOTI Connect and TSC Console's powerful printer management tools to avoid downtime and lower the total cost of ownership. The Alpha-30R's smart battery, paired with printer management tools, can intelligently monitor battery health status and remaining capacity to ensure continuous productivity over a full shift.



Seamless Mobility Communication

Seamless and reliable wireless connectivity is crucial for mobile devices. TSC has introduced our latest 802.11 a/b/g/n/ac Wi-Fi certified module which enables fast roaming and enterprise-grade security to ensure reliable and safe operation. The Alpha-30R is equipped with Apple-certified MFi Bluetooth® 5.0 with NFC tap-to-pair for easy connectivity, and users get a secure connection to print labels on-demand. The TSC Mobile Utility APP is available for both iOS and Android™ users. This APP makes it easy for authorized IT staff to troubleshoot and solve mobile printer problems quickly and efficiently.



Full Line of Accessories

The Alpha-30R offers a full line of accessories including a protective case, multiple battery charging options and more to meet your receipt and label printing requirements. Available with a complete forklift and vehicle accessory option, the Alpha-30R's vehicle mount adaptor gives users the flexibility to easily integrate the printer with a forklift with intuitive RAM® mount components.



Integrated Software Pack

The Alpha-30R supports OPOS drivers and provides mainstream platform SDK including Windows™, Windows™ Mobile (WinCE), Android™, and iOS. The OPOS and SDK software packs integrated into the Alpha-30R mobile printer allow users to interpret ESC/POS commands and to develop applications compatible with the unified POS specification. After integration, the customized software can be leveraged and tailored to switch between POS terminals and printers for quick port communications, connections, and print command transfers.

Alpha-30R Accessories

Alpha-30R	Description	Factory Option	User Option
	Protective Case with Shoulder Strap The protective case enhances the extra level of protection for harsh environment especially for the outdoor usage.		✓
	Shoulder Strap Designed for carrying the printer directly without a protective case.		✓
	Belt Clip Use the belt clip for a complete hands-free solution.		✓
	Li-ion Smart Battery The Li-ion smart battery works with TSC Console and SOTI Connect to monitor battery information, charge cycles, and remaining capacity.		✓
	1-Slot Docking Cradle Easily charge the printer without removing the battery.		✓
	4-Slot Docking Cradle Easily charge multiple printers without removing the battery.		✓
	1-Slot Battery Charger Use the 1-slot charger to quickly charge the battery without any downtime.		✓
	4-Slot Battery Charger The 4-slot charger is well-suited for heavy-duty missions.		✓
	12-24VDC Vehicle Power Adaptor For automobile vehicle plug to charge on the car.		✓
	12-60VDC Vehicle Power Adaptor For automobile vehicle plug to charge on the car.		✓
	Battery Eliminator Connect printer and vehicle power source directly by open-ended wire without using battery. It can be used with vehicle mount adaptor.		✓
	Vehicle Mount Adaptor Easily mount the printer on a forklift.		✓
	Linerless Kit The linerless kit suits linerless printing needs.	✓	

Alpha-30R | Data Sheet

Printer model	Alpha-30R	
Version	Basic	Premium
Resolution	8 dots/mm (203dpi)	
Printing method	Direct Thermal	
Max. print speed	Up to 127 mm (5")/second	Up to 152 mm (6")/second
Max. print width	72 mm (2.83")	
Max. print length	2,794 mm (110")	
Enclosure	Plastic with rubber over molded	
Physical dimension	118 mm (W) x 158 mm (H) x 68 mm (D) 4.64" (W) x 6.22" (H) x 2.68" (D)	
Weight (including battery)	0.65 kg (1.43 lbs)	
Drop specification	2.1 m (6.9 ft), with protective case can be 2.5 m (8.2 ft)	
MIL-STD 810	Drop and vibration	
Tumble test	800 free falls from 1 m (3.3 ft), with protective case can be 1000 free falls from 1 m (3.3 ft)	
IP rating	IP54 (w/o case, paper path is excluded)	
Max. roll capacity	57 mm (2.24") OD	
Processor	32-bit RISC CPU	
Memory	128 MB SDRAM, 128 MB Flash	
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 4.2 + Passive NFC tag * Type C is for communication only	
Power	7.4V DC, 3080 mAh Li-ion rechargeable battery	7.4V DC, 3030 mAh Li-ion rechargeable smart battery
Operation switch, button	• 3 buttons (On/off, feed, and cover-open) • 2 color LEDs for printer status and battery charging status • 1 LCD for printer status	
Sensors	• Reflective sensor • Head open sensor	• Reflective sensor • Gap sensor • Head open sensor
Real time clock	Standard	
Internal fonts	• 8 alpha-numeric bitmap fonts • One Monotype Imaging® CG Triumvirate Bold Condensed scalable font	
Bar code	• 1D bar code Code 39, Code 93, Code128UCC, Code128 subsets A.B.C, Codabar, Interleave 2 of 5, EAN-8, EAN-13, EAN-128, UPC-A, UPC-E, EAN and UPC 2(5) digits add-on, MSI, PLESSEY, POSTNET, China POST, GS1 Data bar • 2D bar code PDF-417, Maxicode, DataMatrix, QR code, Aztec	
Printer language	TSPL-EZC (EPL2, ZPL2, CPCL), or ESC-POS	
Media type	Receipt paper, receipt paper with black mark in printing side, selected label, linerless (outside wound)	Receipt paper, receipt paper with black mark in printing side or backside, label, linerless (outside wound)
Media width	25.4 ~ 80 mm (1" ~ 3.15" w/ liner)	
Media thickness	0.06 ~ 0.16 mm (2.36 ~ 6.3 mil)	
Media height	Label: Min. 25.4 mm (1")	
Media core diameter	Standard: 12.7 mm (0.5") Optional: 19.05 mm (0.75")	
Environment condition	Operation: -20 ~ 55°C (-4 ~ 131 °F), 10 ~ 90% non-condensing Storage: -30 ~ 70°C (-22 ~ 158 °F), 10 ~ 90% non-condensing	
Environmental concern	Comply with RoHS, WEEE	
Accessories	• Quick start guide • Belt Clip • Li-ion battery • Power adapter	
Limited warranty	• Printer: 2 years • Print head: 25 km (1 million inches) or 12 months which comes first • Platen: 50 km (2 million inches) or 12 months which comes first • Battery: 1 year	
Factory options	Linerless kit	
User options	• Type C USB 2.0 cable • 0.75" media core adaptor • Protective case with shoulder strap • Shoulder strap • 1-slot docking cradle • 4-slot docking cradle • 1-slot battery charger	• 4-slot battery charger • 12-24VDC vehicle power adaptor • 12-60VDC vehicle power adaptor • 12-48VDC power source with battery eliminator • Vehicle mount adapter can be used with RAM® MOUNTS

Product models and specifications are subject to change without notice.



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