

Mobile Printer Family





Raise Productivity to the Next Level with Mobile Printers

Mobile printers play an integral part in the workflow of many industries, especially where quick and accurate printing on demand and on-the-go is required at various locations. Whether printing receipts for meter readings, e-citations, mPOS, field services or for direct store delivery, or even labels for mark down, raw materials, finished goods, shipping and receiving, mobile printers can increase efficiency for any printing on demand.

To assess the need for a mobile printing solution, here are some points to consider:

- How often are labels applied within arm's length?
- How often do inaccurate or damaged labels cause interruption to your work?
- Can on-the-go printing reduce the time traveling back-and-forth to a centrally-located stationary printer?

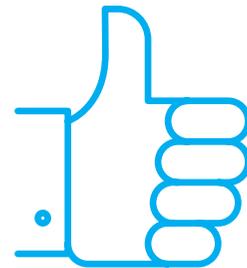
Points to Consider Before Getting Mobile Printers

Before investing in mobile printers, be sure to look at these three points:



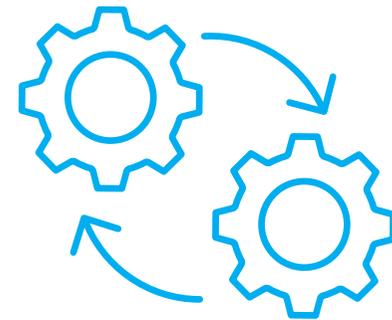
Durability

Printers must be able to withstand accidental falls and drops, resist dust and water for both indoor and outdoor applications.



Ease of Use

A printer that is easy to set up and use will accelerate workflow and boost productivity, thus bringing more value out of your operation.



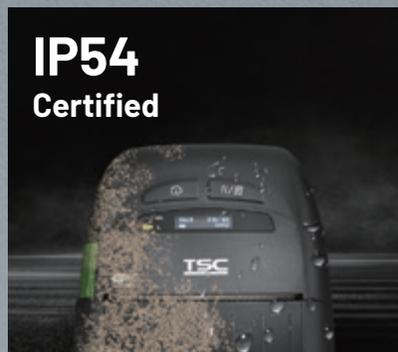
Compatibility

Hassle-free integration or migration is vital when installing or replacing existing devices.

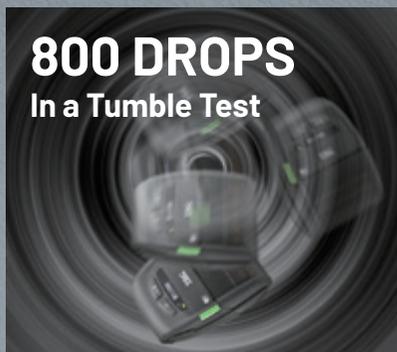
Why TSC AUTO ID Mobile Printers?

Rugged Design for Enduring Harsh Environments

Our IP54-certified mobile printers are not only water-resistant and dust-resistant, but have also endured tough drop and vibration tests, including 800 drops in a tumble test, 2.1 meters drop test, and met the MIL-STD-810 standard for the durability to stand strong even in harsh environments.



IP54 Certified



800 DROPS In a Tumble Test



2.1 M Drop Test



MIL-STD-810 Standard

Easy to Set Up and Use

- ❶ Lightweight and compact to be carried around all-day
- ❷ Easy-to-read LCD/LED and/or large function buttons
- ❸ Reliable and secured dual-band Wi-Fi with fast roaming
- ❹ Easy media loading and support media roll up to 67mm (2.64") OD
- ❺ Easy connectivity via MFi Bluetooth® with NFC tap-to-pair
- ❻ Versatile accessories to give support and enhance the efficiency of operation



Compatibility Matters

Being able to seamlessly integrate with your system is also a determining factor when purchasing mobile printers. With our software, SDK and professional technical support, our mobile printer's compatibility with your system will be enhanced through quicker integration, efficient development, faster deployment, and increased interoperability.

- OPOS drivers for POS application
- Compatible with CPCL, ESC-POS and major printer languages
- Software Development Kit (SDK) for developer to build a custom app

*Specifications vary depending on mobile printer models

Mobile Printer Family

Depending on your requirements, we offer a variety of mobile printers that cater to your needs.



Alpha-2R

The Alpha-2R is a durable and lightweight 2-inch printer capable of working with any mobile printing applications where you need quick access to simple receipts or tickets.



TDM Series

The TDM Series is small and lightweight, withstanding up to 1.8m, and passes the MIL-STD-810G drop test. With choices of 2-inch or 3-inch models for easy, on-the-go printing.



Alpha-3R

The Alpha-3R is lightweight, designed for printing receipts and capable of printing labels. The 3-inch mobile printer is ideal for medium printing volume requirements.



RE310

Value meets proficiency with the 3-inch RE310 allowing it to excel in daily mobile operations across diverse environments. It features seamless connectivity, fast charging, and accommodates a wider range of labels and receipts.



Alpha-30R

The Alpha-30R is user-friendly and drop-resistant. It features a large media capacity and higher battery capacity to boost productivity and streamline operations efficiently.



Alpha-30L/40L

The 3-inch Alpha-30L and 4-inch Alpha-40L propel you into the next generation of smart, enhanced technology solutions. They are optimized for printing in high-duty cycles and demanding environments.



Alpha-40L RFID

The Alpha-40L RFID enhances workers' mobility in challenging environments with a user-friendly and heavy-duty design. It provides the convenience of printing and encoding RFID labels exactly when needed.

Product Specifications

We offer a variety of products, ranging from 2-inches to 4-inches, different print widths, different levels of durability, different media types, and many other specifications to suit your printing needs.



	TDM-20	TDM-30	RE310	Alpha-2R	Alpha-3R	Alpha-30R (Basic)	Alpha-30R (Premium)	Alpha-30L	Alpha-30LHC	Alpha-40L	Alpha-40L RFID*
Type	Mobile Receipt						Mobile Label				
Print Volume	Low printing volume		Medium printing volume			High printing volume					
Print Width	48 mm / 2"	72mm / 3"	72mm / 3"	48 mm / 2"	72mm / 3"				104mm / 4"		
Media Type	Receipt, selected label		Receipt, label	Receipt, selected label			Receipt, label	Label, receipt			Label, RFID label, receipt
Max. Print Speed	4 ips				5 ips	6 ips	5 ips				
Battery Capacity	1130 mAh	3080 mAh (Optional 3030 mAh smart battery)	3080 mAh	1620 mAh	2500 mAh	3080 mAh	3030 mAh (Smart battery)			6200 mAh (Smart battery)	
Media OD	30mm / 1.18"	40mm / 1.57"	51mm / 2"	50mm / 1.96"	Receipt: 57mm / 2.25" Label: 55mm / 2.16"	57mm / 2.24"		67mm / 2.64"			
Weight	215g / 0.47lbs	375g / 0.83 lbs	440g / 0.97lbs	350g / 0.77lbs	550g / 1.21lbs	650g / 1.43lbs		745g / 1.64lbs		985g / 2.17lbs	1025g / 2.26lbs
IP Protection	IP-42		IP-54	IP-42	IP-54 with case	IP-54					
Tumble Test	500 falls from 0.5m		500 falls from 1m	N/A		800 falls from 1m		500 falls from 1m			
Drop Test	1.8m		1.5m	1.5m		2.1m		1.8m			
Military Standard	MIL-STD-810G drop test		N/A	N/A		MIL-STD-810G drop and vibration test					
Linerless Option	Yes		No	Yes	No	Yes				No	
Interface	USB 2.0, 802.11 a/b/g/n with Bluetooth 5.0, MFI Bluetooth 5.0, NFC		Type C USB 2.0, 802.11 a/b/g/n with Bluetooth 5.0, Bluetooth 5.3, NFC	USB 2.0, 802.11 a/b/g/n*, Bluetooth 5.0*, NFC*, RS-232*	USB 2.0, 802.11 a/b/g/n*, Bluetooth 4.0*, RS-232*	Type C USB 2.0, 802.11 a/b/g/n/ac with Bluetooth 5.0, MFI Bluetooth 5.0, NFC					

*Optional feature, please contact your local sales representative

Select the Printers Tailored to Your Needs

Printer	Vertical Markets	Type	Media Type	Print Width	Max. Print Speed	Battery Capacity	Media OD	Weight	IP Protection	Tumble Test	Drop Test	Military Standard	Linerless Option
 RE310	Retail & hospitality Transportation & logistics Public sector Manufacturing & warehouse	Mobile receipt	Receipt, label	72mm / 3"	4ips	3080 mAh	51mm / 2"	440g / 0.97lbs	IP-54 with and without case	500 falls from 1m	1.5m	N/A	No
 TDM-20	Retail Warehouse & logistics Entertainment & hospitality Public sector Transportation Healthcare	Mobile receipt	Receipt, selected label	48 mm / 2"	4ips	1130mAh	30mm / 1.2"	215g / 0.47lbs	IP-42; IP-54 with case	500 falls from 0.5m; 500 falls from 1m with case	1.8m; 2.5m with case	MIL-STD-810G drop test	Yes
 TDM-30	Retail Warehouse & logistics Entertainment & hospitality Public sector Transportation Healthcare	Mobile receipt	Receipt, selected label	72mm / 3"	4ips	3080 mAh (Optional 3030 mAh smart battery)	40mm / 1.6"	375g / 0.83 lbs	IP-42; IP-54 with case	500 falls from 0.5m; 500 falls from 1m with case	1.8m; 2.5m with case	MIL-STD-810G drop test	Yes
 Alpha-2R	Retail Warehouse & logistics Entertainment & hospitality Public sector Transportation	Mobile receipt	Receipt, selected label	48 mm / 2"	4ips	1620 mAh	50mm / 1.96"	350g / 0.77lbs	IP-42; IP-54 with case	N/A	1.5m; 2m with case	N/A	Yes
 Alpha-3R	Retail Warehouse & logistics Entertainment & hospitality Public sector Transportation	Mobile receipt	Receipt, selected label	72mm / 3"	4ips	2500 mAh	Receipt: 57mm / 2.25" Label: 55mm / 2.16"	550g / 1.21lbs	IP-54 with case	N/A	1.5m	N/A	No
 Alpha-30R (Basic)	Retail Warehouse & logistics Entertainment & hospitality Healthcare Manufacturing	Mobile receipt	Receipt, selected label	72mm / 3"	5ips	3080 mAh	57mm / 2.24"	650g / 1.43lbs	IP-54 with and without case	800 falls from 1m; 1000 falls with case	2.1m; 2.5m with case	MIL-STD-810G drop and vibration test	Yes
 Alpha-30R (Premium)	Retail Warehouse & logistics Healthcare Manufacturing	Mobile receipt	Receipt, label	72mm / 3"	6ips	3030 mAh (Smart battery)	57mm / 2.24"	650g / 1.43lbs	IP-54 with and without case	800 falls from 1m; 1000 falls with case	2.1m; 2.5m with case	MIL-STD-810G drop and vibration test	Yes

Select the Right Printer for Your Applications

Whether you're printing barcodes, labels, receipts, tags or tickets, we make it easy to help you to select the right printer to meet your requirements ranging from levels of duty cycle, media types, weight or size restraints, to durability.

Application requirement	Application	Print Width	Media Type	Recommended Model
<ul style="list-style-type: none"> High-duty cycle environment Optimized for labels, can print receipts Durable mobile printer 	<ul style="list-style-type: none"> Inventory management, cycle count Receiving, put-away, reverse logistics Picking, staging, packing, shipping Price display compliance 	<ul style="list-style-type: none"> Click and collect (BOPIS) Cross-docking Raw materials Finished goods 	104mm / 4"	Receipts and / or labels  Alpha-40L
			72mm / 3"	Receipts and / or labels  Alpha-30L
<ul style="list-style-type: none"> High-duty cycle environment Optimized for receipts, can print labels Most rugged mobile printer 	<ul style="list-style-type: none"> Inventory management, cycle count Receiving, put-away, reverse logistics Picking, staging, packing, shipping Quick and efficient checkout Proof of pickup and delivery 	<ul style="list-style-type: none"> Direct store delivery Cross-docking Fleet management and maintenance Ticketing In-cabin service 	72mm / 3"	Receipts and / or labels  Alpha-30R
<ul style="list-style-type: none"> Medium-duty cycle environment Optimized for receipts, can print labels Durable mobile printer 	<ul style="list-style-type: none"> Quick and efficient checkout Proof of pickup and delivery Direct store delivery Fleet management and maintenance 	<ul style="list-style-type: none"> Ticketing In-cabin service Field sales Field service 	72mm / 3"	Receipts and / or labels  Alpha-3R
			48mm / 2"	Receipts and / or labels  Alpha-2R
<ul style="list-style-type: none"> Medium-duty cycle environment Optimized for receipts, can print labels Budget-friendly mobile printer 	<ul style="list-style-type: none"> Quick and efficient checkout In-store service In-cabin service Field sales Field service 		72mm / 3"	Receipts and/or labels  RE310
<ul style="list-style-type: none"> Low-duty cycle environment Optimized for receipts, can print labels Small, lightweight mobile printer 	<ul style="list-style-type: none"> Quick and efficient checkout Proof of pickup and delivery Fleet management and maintenance Ticketing 	<ul style="list-style-type: none"> In-store service In-cabin service Field service Government e-citation 	72mm / 3"	Receipts  TDM-30
			48mm / 2"	Receipts  TDM-20
<ul style="list-style-type: none"> RFID tag encoding and printing at the point of application Durable mobile printer Rugged mobility Versatile media types, RFIDs, labels and receipts 	<ul style="list-style-type: none"> In-store tagging Direct to store or consumer delivery Closed-loop airline baggage tracking Remote tagging of in-field asset 	<ul style="list-style-type: none"> Laboratory sample and drug management Device and asset management 	104mm / 4"	Receipts and / or labels and / or RFID tags  Alpha-40L RFID
<ul style="list-style-type: none"> Antimicrobial casing for healthcare environments Easy-to-clean and disinfect Medical standard IEC-60601-1 certified power supply Durable mobile printer Rugged mobility 	<ul style="list-style-type: none"> Emergency medical service Ambulance Specimen labeling 		72mm / 3"	Receipts and/or labels  Alpha-30LHC

Versatile Accessories

We provide a full line of value-added accessories to ensure the items can empower diverse operations in many different aspects.

Cables

Printer Model	Alpha-30R		Alpha-30L	Alpha-30LHC	Alpha-40L & Alpha-40L RFID	Alpha-2R	Alpha-3R	RE310	TDM-20	TDM-30
	Basic	Premium	3"	3"	4"	2"	3"	3"	2"	3"
Version	Basic	Premium	3"	3"	4"	2"	3"	3"	2"	3"
USB Cable	Type C	Type C	Type C	Type C	Type C	Mini	Mini	Type C	Micro B	Micro B
USB to RS-232 Converter Cable	N/A	N/A	N/A	N/A	N/A	✓	✓	N/A	N/A	N/A

Charging Solutions

Printer Model	Alpha-30R		Alpha-30L	Alpha-30LHC	Alpha-40L & Alpha-40L RFID	Alpha-2R	Alpha-3R	RE310	TDM-20	TDM-30
	Basic	Premium	3"	3"	4"	2"	3"	3"	2"	3"
Power Adaptor(5V 2A)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓	N/A	N/A
Power Adaptor(12V 1A)	✓	✓	N/A	N/A	N/A	✓	✓	N/A	✓	✓
Power Adaptor(12V 2A)	N/A	N/A	✓	✓*	✓	N/A	N/A	N/A	N/A	N/A
1-Slot Battery Charger 	✓	✓	✓	N/A	✓	✓	✓	✓	✓	✓
4-Slot Battery Charger 	✓	✓	✓	✓*	✓	✓	✓	✓	✓	✓
1-Slot Docking Cradle 	N/A	✓	✓	N/A	✓	N/A	N/A	N/A	✓	✓
4-Slot Docking Cradle 	N/A	✓	✓	N/A	✓	N/A	N/A	N/A	✓	✓
Regular Battery	3080mAh	N/A	N/A	N/A	N/A	1620mAh	2500mAh	3080mAh	1130mAh	3080mAh
Smart Battery	N/A	3030mAh	3030mAh	3030mAh	6200mAh	N/A	N/A	N/A	N/A	3030mAh

* IEC-60601-1 certified power supply available for healthcare application requirements

Carrying and Protection Solutions

Printer Model	Alpha-30R		Alpha-30L	Alpha-30LHC	Alpha-40L & Alpha-40L RFID	Alpha-2R	Alpha-3R	RE310	TDM-20	TDM-30
	Basic	Premium	3"	3"	4"	2"	3"	3"	2"	3"
Version										
Belt Clip 	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Protective Case with Shoulder Strap 	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Media Core Adapter 0.75"	✓	✓	✓	✓	✓	N/A	N/A	✓	N/A	N/A
Media Core Adapter 1" + 1.5"	✓	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A
Media Adapter /Spacer Kit 	N/A	N/A	N/A	N/A	N/A	✓	N/A	N/A	✓	✓
Media Hanger 	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓

Forklift and Vehicle Solutions

Printer Model	Alpha-30R		Alpha-30L	Alpha-30LHC	Alpha-40L & Alpha-40L RFID	Alpha-2R	Alpha-3R	RE310	TDM-20	TDM-30
	Basic	Premium	3"	3"	4"	2"	3"	3"	2"	3"
Version										
Vehicle Mount Adaptor 	N/A	✓	✓	✓	✓	N/A	N/A	N/A	✓	✓
Quick Release Vehicle Mount Kit 	N/A	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A
External Fanfold Media Holder with Expansion Kit 	N/A	N/A	✓	✓	✓	N/A	N/A	N/A	N/A	N/A
External Fanfold Media Holder with Quick Release Vehicle Mount Kit 	N/A	N/A	✓	✓	✓	N/A	N/A	N/A	N/A	N/A
12-24V DC Vehicle Power Adaptor 	✓	✓	✓	✓	✓	✓	✓	N/A	✓	✓
12-60V DC Vehicle Power Adaptor 	✓	✓	✓	✓	✓	✓	✓	N/A	✓	✓
12-60V DC Vehicle Open End Power Adaptor 	✓	✓	✓	✓	✓	✓	✓	N/A	✓	✓
12-48V DC Power Source with Battery Eliminator 	✓	✓	✓	✓	✓	N/A	N/A	✓	N/A	✓
12-48V Wire to Wire Battery Eliminator with Power Supply 	✓	✓	✓	✓	✓	N/A	N/A	✓	N/A	N/A
Wire to Wire Dummy Battery Pack 	✓	✓	✓	✓	✓	N/A	N/A	✓	N/A	N/A

Compatible Accessories

In addition, we have a variety of accessories that can be shared among different models, making these items more cost effective.



Printer Model		Alpha-2R	TDM-20	TDM-30	Alpha-3R	RE310	Alpha-30R	Alpha-30R	Alpha-30L	Alpha-30LHC	Alpha-40L
Version		2"	2"	3"	3"	3"	Basic	Premium	3"	3"	4"
USB Cable		Mini	Micro B	Micro B	Mini	Type C	Type C	Type C	Type C	Type C	Type C
USB to RS-232 Converter Cable		●	N/A	N/A	●	N/A	N/A	N/A	N/A	N/A	N/A
Carrying and Protection Solutions	Belt Clip	N/A	▲	▲	N/A	◆	◆	◆	■	■	■
	Protective Case with Shoulder Strap	N/A	N/A	N/A	N/A	N/A	★	★	☆	☆	N/A
	Media Core Adaptor 0.75"	N/A	N/A	N/A	N/A	N/A	●	●	●	●	●
	Media Core Adaptor 1" + 1.5"	N/A	N/A	N/A	N/A	N/A	✕	✕	✕	✕	✕
Forklift and Vehicle Solutions	Vehicle Mount Adaptor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✦	✦	N/A
	Quick Release Vehicle Mount Kit	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
	External Fanfold Media Holder with Expansion Kit	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
	External Fanfold Media Holder with Quick Release Vehicle Mount Kit	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
	12-24V DC Vehicle Power Adaptor	◎	◎	◎	◎	N/A	◎	◎	◎	◎	◎
	12-60V DC Vehicle Power Adaptor	□	□	□	□	N/A	□	□	□	□	□
	12-60V DC Vehicle Open End Power Adaptor	▼	▼	▼	▼	N/A	▼	▼	▼	▼	▼
	12-48V DC Power Source with Battery Eliminator	N/A	N/A	◇	N/A	◇	◇	◇	◇	◇	N/A
12-48V Wire to Wire Battery Eliminator with Power Supply	N/A	N/A	N/A	N/A	✦	✦	✦	✦	✦	N/A	
Wire to Wire Dummy Battery Pack	N/A	N/A	N/A	N/A	✦	✦	✦	✦	✦	N/A	
Charging Solutions	Power Adaptor (5V 2A)	N/A	N/A	N/A	N/A	✦	N/A	N/A	N/A	N/A	N/A
	Power Adaptor (12V 1A)	✦	✦	✦	✦	N/A	✦	✦	N/A	N/A	N/A
	Power Adaptor (12V 2A)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	+	✦	+
	1-Slot Battery Charger	✦	N/A	⌘/✦	N/A	⌘/✦	⌘/✦	⌘/✦	⌘/✦	N/A	⌘
	4-Slot Battery Charger	△	N/A	✦/△	N/A	✦/△	✦/△	✦/△	✦/△	✦*/△	✦
	1-Slot Docking Cradle	N/A	N/A	N/A	N/A	N/A	N/A	▲	▲	N/A	▲
	4-Slot Docking Cradle	N/A	N/A	N/A	N/A	N/A	N/A	★	★	N/A	★
	Regular Battery	1620mAh	1130mAh	3080mAh	2500mAh	3080mAh	3080mAh	N/A	N/A	N/A	N/A
	Smart Battery	N/A	N/A	3030mAh	N/A	N/A	N/A	3030mAh	3030mAh	3030mAh	6200mAh

Note: The same symbol within an accessory indicates compatibility among the models
 *IEC-60601-1 certified power supply available for healthcare application requirements

Success Stories

e-Commerce Warehouse



Alpha Series Mobile Printers Facilitate Warehouse Operations at Full Throttle

Overview

One of the leaders of Taiwan's e-commerce industry is expanding its warehouse and logistic networks with additional label printers to support operational surges with efficiency. Given its current WMS (Warehouse Management System) system bundle, the company could not easily migrate to other branded devices.

Solution

TSC Auto ID's engineers studied, verified, and customized the firmware to enable Alpha-40L and Alpha-4L mobile printers to understand the current WMS system language.

User Benefits

- Overcome system constraints
- Resolve printer supply shortage
- Easy for operators and IT staff to use and manage

Healthcare



Alpha-3R Mobile Printers Accelerate Specimen Collection and Management

Overview

Nurses have to deal with a large number of specimens when rotating through the ward, and mislabeling specimens could lead to medical disputes. The hospital needs to print out patient information and label each specimen immediately after collecting the samples from patients to prevent mislabeling.

Solution

The Alpha-3R mobile printers are mounted on medical carts and are connected to HIS (Hospital Information System) to print out required information on the spot.

User Benefits

- Durable to withstand hospital shifts
- Easily print required information via HIS
- Easy for nurses and IT staff to use and manage

CORPORATE HEADQUARTERS

TSC Auto ID Technology Co., Ltd.
Tel: +886 2 2218 6789
E-mail: apac_sales@tscprinters.com

LI ZE PLANT

TSC Auto ID Technology Co., Ltd.
Tel: +886 3 990 6677
E-mail: apac_sales@tscprinters.com

CHINA

Tianjin TSC Auto ID Technology Co., Ltd.
Tel: +86 22 5981 6661
E-mail: apac_sales@tscprinters.com

ASIA PACIFIC

TSC Auto ID Technology Co., Ltd.
Tel: +886 2 2218 6789
E-mail: apac_sales@tscprinters.com

KOREA

TSC Korea Representative Office
Tel: +82 2 852 3322
E-mail: apac_sales@tscprinters.com

INDIA

TSC India Representative Office
Tel: +91 2249 679 315
E-mail: apac_sales@tscprinters.com

EMEA

TSC Auto ID Technology EMEA GmbH
Tel: +49 (0) 8106 37979 000
E-mail: emea_sales@tscprinters.com

RUSSIA

TSC Auto ID Technology EMEA GmbH
Tel: +7 495 646 3538
E-mail: emea_sales@tscprinters.com

MIDDLE EAST

TSC Auto ID Technology ME Ltd, FZE
Tel: +971 4 2533 069
E-mail: emea_sales@tscprinters.com

AMERICAS

TSC Auto ID Technology America Inc.
Tel: +1 657 258 0808
E-mail: americas_sales@tscprinters.com

MEXICO

TSC Mexico Representative Office
Tel: +1 52 (33) 3673 1406
E-mail: americas_sales@tscprinters.com

BRAZIL

TSC Brazil Representative Office
Tel: +55 (11) 3554 7225
E-mail: americas_sales@tscprinters.com