

Standalone Mobile Labeling for Scalable, Host-Independent Operations

A mobility-driven, standalone labeling solution enabling on-demand printing at the point of work, improving labeling efficiency, consistency, and deployment flexibility.

Solution Overview

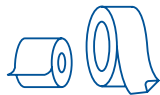
A standalone labeling architecture designed for decentralized, host-independent operations across retail environments.

The solution empowers users to execute task-based labeling workflows at the edge with mobile devices, preconfigured templates, and synchronized data.

The solution combines:



Linerless-ready desktop printers with battery stations support higher-volume or semi-mobile use, while mobile printers enable on-the-go labeling



Validated linerless labels ensure printer-label compatibility and consistent output quality

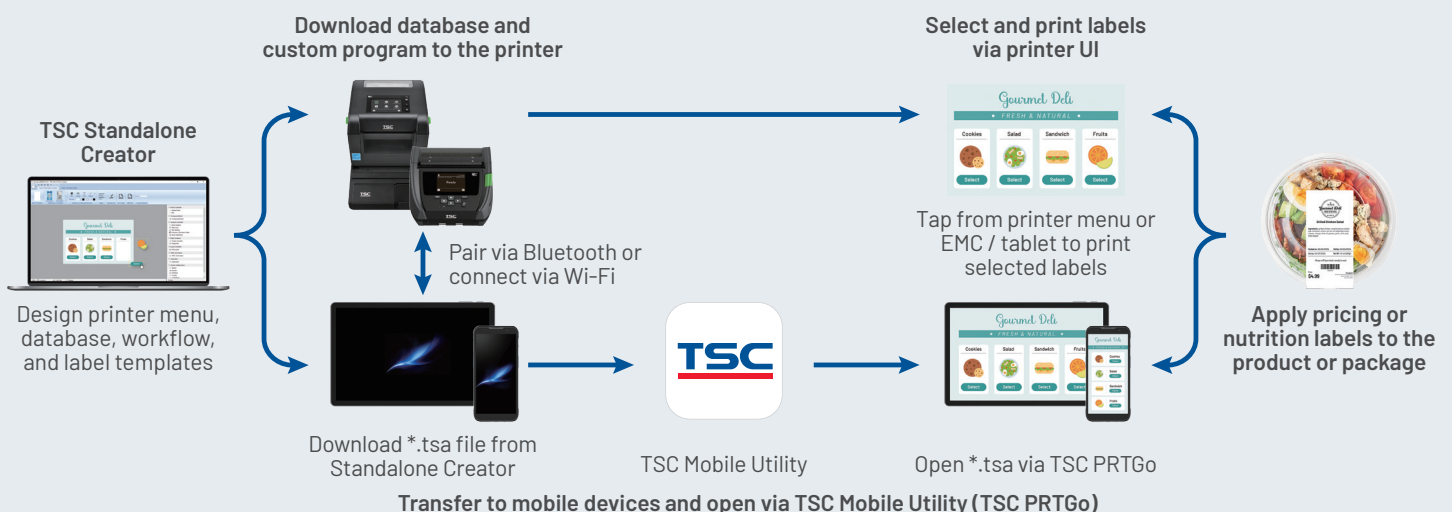


TSC Standalone Creator enables host-independent, template-based printing through printer menus



Mobile computers and tablets running TSC Mobile Utility enable mobile workflows

This architecture supports consistent, scalable labeling without requiring a host PC or complex backend integration.



Architecture Components

A. Workflow & Standalone Control (Software)

TSC Standalone Creator + Mobile Utility

- Design printer UI menus based on user-specific workflows with guided data input
- Configure database lookup and variable data
- Enable host-independent execution on printers or mobile devices
- Support mobile-triggered printing via TSC Mobile Utility

B. Standalone Label Printing (Printers)

Printers designed for edge and standalone operation:

- Desktop printers with battery stations or mobile printers for flexible deployment
- Linerless-ready support for reduced waste and adaptable label lengths
- On-device UI supports task-based label selection and printing without a PC
- Supports database-driven and template-based label output

C. Mobile-Enabled Operation (Mobile Devices)

Enterprise mobile computers and tablets enable:

- Wireless connectivity (Bluetooth / Wi-Fi) for device communication
- Enable on-demand, task-based labeling and printing at the point of work
- Secondary display capability for printer UI interaction
- Flexible workflows across the store floor, back office, and distribution centers



Operational Impact

Host-independent, mobile-driven labeling at the edge enables:

30–50%

faster relabeling
per shift

+25–35%

productivity
improvement

100%

elimination of
liner waste

20–30%

fewer labeling and
compliance errors

40–70%

Chargebacks
reduction

Reduced

labor and
operational costs

Deployment Characteristics

The solution is designed for flexible and scalable deployment:

- Supports standalone and mobile-enabled environments
- Scalable across single-site to multi-site deployments and across departments, stores, and operational zones
- Suitable for both stationary and mobile labeling scenarios
- Enables flexible deployment without reliance on host PCs



Business & Technical Value

Key operational and technical benefits of this architecture include:

- **Operational Efficiency:** Reduces dependency on fixed workstations and streamlines execution
- **Mobility & Flexibility:** Enables labeling at the point of work across store and DC environments
- **Deployment Simplicity:** Minimizes IT dependency with host-independent operation
- **Consistency & Control:** Standardizes templates ensure uniform output across locations
- **Scalable AIDC Ecosystem:** Integrates printing, mobility, linerless labels, and software within a unified stack



Target Environments

- In-store pricing, promotion, and shelf labeling
- Fresh food, deli, and prepared food labeling
- In-store back office and retail fulfillment operations
- Multi-store retail chains with standardized labeling requirements
- Edge environments with frequent, variable, on-demand label printing

