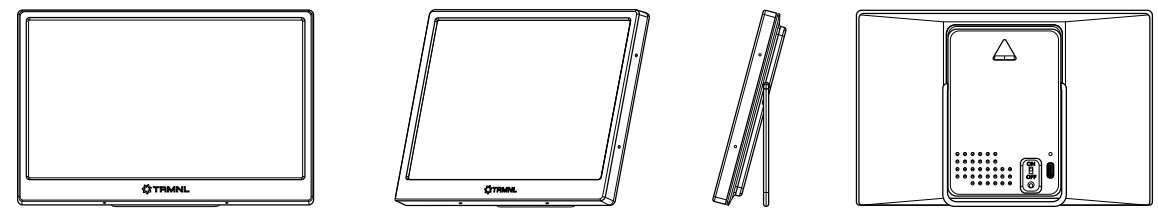
TRMNL OG

7.5" ePaper Dashboard



00 OVERVIEW

TRMNL is a battery-powered ePaper display that connects to your data sources and renders them as glanceable dashboards. Choose from 1345+ pre-built integrations or build custom dashboards using any API with HTML/CSS templating.

Typical deployments include sales metrics, calendars, operational status boards, and internal announcements. One-way communication architecture ensures your network remains isolated — the device pulls data from the server, never the reverse.

01 IDENTIFICATION

Model	TRMNL-OG-GEN1
SKU	TRMNL-OG
UPC	615629954278

02 DISPLAY

Screen Size	7.5 inches (diagonal)
Resolution	800 × 480 pixels
Pixel Density	128 PPI
Display Type	ePaper (EPD)
Grayscale	4 levels
Refresh Rate	~2 seconds
Viewing Angle	180°
Contrast Ratio	10:1

03 PHYSICAL

Dimensions (W × H × D)	171 × 116 × 10 mm
Weight	120 grams (1800mah battery), 165 grams (2500mah battery)
Enclosure Material	PC (transparent), ABS (other colors)
Color	Black, White, Transparent, Sage, (faux) Wood, Grey
Orientation	Landscape
Mounting Options	Desk stand (included), Hook recess
Water Resistance	No
Controls	Button
Logo Placement	Front of device
Custom Branding	Available
Zero-Logo Option	Yes

04 POWER

Battery Type	Rechargeable Li-Po
Battery Capacity	1800/2500 mAh
Battery Life	3–6 months (typical use)
Charging Port	USB-C
Charging Time	3.5-5 hours
Refresh Interval	15 min (default), configurable
Power Consumption (Sleep)	< 0.5 mW

05 HARDWARE

PROCESSOR & MEMORY

Processor	ESP32-C3
RAM	400 KB
Flash Storage	4 MB

WIRELESS

WiFi Standard	802.11 b/g/n
WiFi Frequency	2.4 GHz
Security Protocols	WPA, WPA2

SENSORS & PERIPHERALS

Ambient Light Sensor	No
Temperature Sensor	No
Touch Sensor	No
Accelerometer	No
Buttons	1× reset
Status LED	Yes (charging status only)

06 ECOSYSTEM

FIRMWARE

Operating System	Custom firmware
License	Open source (GPLv3)
Source Code	github.com/usetrmnl/firmware
OTA Updates	Yes
License	GPLv3

SOFTWARE

Connection Options	TRMNL Cloud or Self-Hosted (BYOS)
BYOS Server Implementations	Ruby, Python, PHP, Node.js, Elixir
Mashups	Up to 4 data sources per screen
Smart Playlists	Time-based and conditional logic
Fleet Management	Yes (Partners API)
License	MIT (OSS servers only)

API & CLOUD

Cloud Sync	Yes
API	RESTful
Partner API	Yes
Webhook Support	Yes

APPLICATIONS

Web Dashboard	Yes
iOS App	Yes (Calendar Sync)
Android App	Yes

INTEGRATIONS

Published Plugins	1345+ available
Custom Plugins	Supported (HTML/CSS/Liquid)

07 SECURITY

Communication	One-way (device-initiated only)
Network Access	Device cannot be accessed remotely
Data Storage	User-controlled (Cloud or BYOS)
Encryption	TLS 1/1.1/1.2
GDPR Compliant	Yes
SOC 2	N/A

08 ENVIRONMENTAL

Operating Temperature	0°C to 40°C / 32°F to 104°F
Storage Temperature	-20°C to 60°C / -4°F to 140°F
Operating Humidity	OG: 20% – 80% (estimate, not tested) X: 20%-100%, test pending (main board only)
Storage Humidity	OG: 10% – 90% (estimate, not tested) X: 20%-100%, test pending (main board only)
Altitude	0 to 2000m
Shock Resistance	Not tested
Vibration Resistance	Not tested

09 COMPLIANCE & CERTIFICATIONS

FCC (USA)	OG: Certified X: Pending
CE (Europe)	OG: Certified X: Pending
UKCA (UK)	OG: Japan, Canada X: Pending
RoHS	OG: Certified X: Pending
WEEE	OG: Compliant X: TBD

10 PACKAGE CONTENTS

TRMNL 7.5" Display	1
Desk Stand	1
Quick Start Guide	1
USB-C Charging Cable	0-1 (optional add-on)
Microfiber Cleaning Cloth	0-1 (optional add-on)

11 WARRANTY & SUPPORT

Warranty Period	1 year manufacturer defects
Support Channels	Live Chat, Email (direct to engineers)
Community	Discord, GitHub
Documentation	docs.trmnl.com
Firmware Updates	Lifetime OTA updates
RMA Process	Contact support

12 ORDERING

Retail Price	$139 USD
Volume Pricing	Available
Minimum Order Quantity	150 units
Lead Time	Ships within 2 business days
Fulfillment Locations	USA, Berlin (duty-free EU)
Country of Origin	USA

13 ACCESSORIES

Developer Edition	API access for $20
Battery Upgrade	2500mah for $10
Clarity Kit	$25
BYOD License	$50