



Product Name:
MTN Rugged Mini Kit

● Rugged Mini Kit

RUGGED MINI KIT DATA SHEET

PRODUCT DESCRIPTION

The Rugged Mini Kit is a self-contained, field-deployable connectivity system integrating Starlink and 5G communications, housed in a ruggedized waterproof case. Designed for reliability in off-grid or mobile environments, it provides seamless power, networking, and deployment features for mission-critical applications.

POWER SYSTEM	DETAILS
BATTERY TYPE	LiFePO ₄ (Lithium Iron Phosphate)
BATTERY CAPACITY	288Wh
DC OUTPUT POWER	Up to 300W continuous / 600W peak
CYCLE LIFE	4,000+ charge cycles to 70% capacity
CHARGING OPTIONS	USB-C PD, Solar input, Vehicle input
AC CHARGING	140W USB-C PD (3 hours full charge)
SOLAR CHARGING	100W panel, foldable, IP67, 23% efficiency
SYSTEM LOAD ESTIMATE	20W-45W continuous (avg. ~25W), 6-7hrs runtime on battery alone

PHYSICAL CHARACTERISTICS	DETAILS
DIMENSIONS (Closed)	18.5 × 14.2 × 7.5 in (470 × 360 × 190 mm)
WEIGHT (Without solar panel)	23 lbs (10.4 kg)
COLOR	Matte black
FORM FACTOR	Portable, carry-on size with molded handle
MOUNTING	Lid-mounted Starlink Mini bracket (fixed tilt)
CONSTRUCTION	Ultra high-strength polypropylene



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ENCLOSURE & ENVIRONMENTAL PROTECTION

- Built into a waterproof, dustproof, high-impact case
- All ports and antennas sealed with IP67 caps when not in use
- Closed-cell polyurethane foam interior for shock/vibration protection
- Custom aluminum heatsink for passive thermal management
- Operating temperature range aligned with Starlink Mini (-30°C to +50°C)
- Includes fixed-angle bracket for Starlink Mini mounting on case lid
- Fully self-contained layout - all components stored inside when closed

CONNECTIVITY & ANTENNAS

- Starlink Mini antenna
- Integrated 5G cellular router with LTE fallback and eSIM + dual nano-SIM support
- 2 × external high-gain cellular antennas (IP67)
- 2 × dual-band Wi-Fi antennas (2.4GHz + 5GHz, IP67)
- 1 × RJ45 Ethernet port (externally accessible, IP67-capped)
- SIM card slots are internal (not accessible externally)

USER INTERFACE & EXTERNAL FEATURES

- ✓ External LED-backlit power button for system activation
- ✓ Low-power e-paper display for:
 - Battery percentage
 - Connection status (Starlink/5G)
 - Charging source and signal strength
- ✓ Externally accessible ports:
 - USB-C charging input
 - Solar charging input
 - Ethernet (RJ45)
 - USB-C port for device charging
- ✓ No internal access needed for normal use
- ✓ Designed for field setup and rapid deployment