



Badger Meter

ORION®  
Trimble® Ranger™ Handheld

## OVERVIEW

The Trimble Ranger is a handheld, full-featured data collection computer. It combines a Windows® mobile operating system, ergonomic keypad and military-grade durability, providing a full day of continuous meter reading. The Trimble Ranger handheld is compatible with manual, touch and ORION endpoint systems.

## OPERATION

**System:** The Trimble Ranger handheld utilizes a Windows mobile 5.0 operating system.

**Display:** The 320 x 240 landscape color touchscreen with LED backlight supports reading in both dark and sunlight applications.

**Control:** The Trimble Ranger handheld features ergonomic navigation with versatile alpha and numeric keypads that are easy to use, even when wearing gloves. The user may also operate the handheld using the easy-to-navigate touch-screen controls.

**Power:** A 6600 mAh lithium ion rechargeable battery pack powers the Trimble Ranger handheld, providing a full day of continuous usage under normal operating conditions.

**Performance:** The Trimble Ranger handheld was designed to meet MIL-STD-810F military standards for drops, vibration, humidity, altitude, and extreme temperatures. With an IP67 rating, it is impervious to water, dust and the harsh conditions involved with meter reading.

**ORION:** An ORION equipped handheld can be used for reading and programming endpoints and as a troubleshooting tool in the field. The Trimble Ranger handheld can be ordered with an internal ORION FHSS mobile transceiver or receiver, or a non-radio handheld can be upgraded at a later date to meet the needs of the utility.



## STANDARD FEATURES

Microsoft Windows Mobile 5.0

53 tactile keys with separate navigation, alpha and numeric keypads, plus 8+1 directional pad

Touchscreen

Embedded Bluetooth®

Embedded 802.11g WiFi

Full-day battery life under normal operating conditions

Complete recharge in 4.5 hours (80% in 2 hours)

Battery charge status LED indicator

Notification LED

Rugged polycarbonate shell

Integrated speaker and microphone

## STANDARD SOFTWARE

### Badger Suite of Field Application Software

Meter Reading Software; Admin and Kiosk Modes  
Programming/Field Troubleshooting Software

### Additional Windows® Applications

Word® Mobile  
Excel® Mobile  
PowerPoint® Mobile  
Outlook® Mobile  
Pocket Internet Explorer  
Contacts  
Tasks  
Calendar  
Calculator  
Notes  
Windows® Media Player  
Microsoft® Pictures and Videos  
Microsoft ActiveSync  
Online help

## STANDARD ACCESSORIES

AC charger  
Charging cradle  
Screen protectors (15-pack)  
User's guide  
USB cable  
Hand strap and lanyard  
Touch screen stylus

## I/O

**Ports** .....9-pin serial port—RS232 (115 Kbps)  
USB host and client  
DC power port

## PHYSICAL

**Size** ..... 10.5" (26.6 cm) x 5.2" (13.1 cm) x 1.9" (4.8 cm)  
**Weight** .....2.1 lb (952 g), including battery

## ELECTRICAL

**Processor**..... Intel PXA 270 XScale CPU  
**Expansion**..... 1x Type I and 1x Type II CompactFlash slots  
1x Secure Digital I/O (SDIO) slot  
**Display**..... 320 x 240 pixel (1/4 VGA)  
color TFT with LED backlight  
**Power**..... Lithium-Ion rechargeable pack  
6600 mAh

## ENVIRONMENT

**Operating Temperature**..... 0 to 140 °F (-18 to 60 °C)  
**Storage Temperature**..... -40 to 158 °F (-40 to 70 C)  
**Humidity**..... MIL-STD-810F, Method 507.4  
**Water**..... IP67, sealed against accidental immersion  
(1 m for 30 min.)  
MIL-STD-810F, Method 512.4, Procedure I  
**Drop**..... MIL-STD-810F, Method 516.5  
Procedure IV 48" onto concrete  
26 drops at room temperature  
(all faces, edges, corners, one drop each)  
6 face drops at 60 C, 6 face drops at -30 C  
**Dust**..... IP67, MIL-STD-810F, Method 510.3  
Procedures I & II  
**Vibration**..... MIL-STD-810F, Method 514.5  
Procedure I, Figs. 5 & 17  
**Altitude**..... MIL-STD-810F, Method 500.4  
Procedures I, II & III, 15,000 ft at 73 °F (23 C)

## SPECIFICATIONS

**Processor Speed**.....Intel XScale, 520 MHz  
**Memory**.....SDRAM ~22MB reserved, 128MB  
Data storage (On-board Flash) ~40 MB reserved, 512 MB  
**Wireless**.....Integrated Bluetooth® and 802.11g, standard

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