



Settop M1

TOTAL STATION CONTROLLER FOR AUTOMATED MONITORING

The Settop M1 monitoring controller enables users to remotely manage and control Trimble S and SX series total stations for real-time monitoring projects. Combined with Trimble® 4D Control™, users can reliably analyze, report, and alarm on movement 24 hours a day, creating a robust automated movement detection solution.



The Settop M1 reduces equipment requirements and eliminates many of the devices required for real-time monitoring jobs by combining the functionality of a field computer, remote switch, device server, router, Wi-Fi router, and 4G cellular modem into one device. With the Settop M1, you greatly reduce the complexity of system setup in the field-saving time and effort.

With a large internal memory, the Settop M1 monitoring controller bridges communication gaps by continuing to collect and store data from the total station during any communication network outages. This enables all data to be transmitted to Trimble 4D Control monitoring software when the network connection is restored, ensuring every measurement cycle is part of the reporting and alarming required by real-time monitoring.

Key Features

- ▶ This one-of-a-kind total station controller is a combination of a field computer, device server, router, 4G cellular modem and remote switch. By merging these items into one device, field set-up is quick and simple.
- ▶ Data collection and storage is continuous; even when the internet connection is disrupted, measurement cycles will continue.
- ▶ Free subscription to IST Connect Cloud Service simplifies central server connection.

The Settop M1 web interface gives you control over your total station, including remotely configuring automatic measurement cycles and checking the status of data collection. The Web UI is accessible when you are in the field via the Settop M1 Wi-Fi access point or back in the office using the IST Connect cloud service. Now it's easy to access the total station remotely to change settings or check status at anytime, from anywhere, without the need for a static IP or complex IT setup.

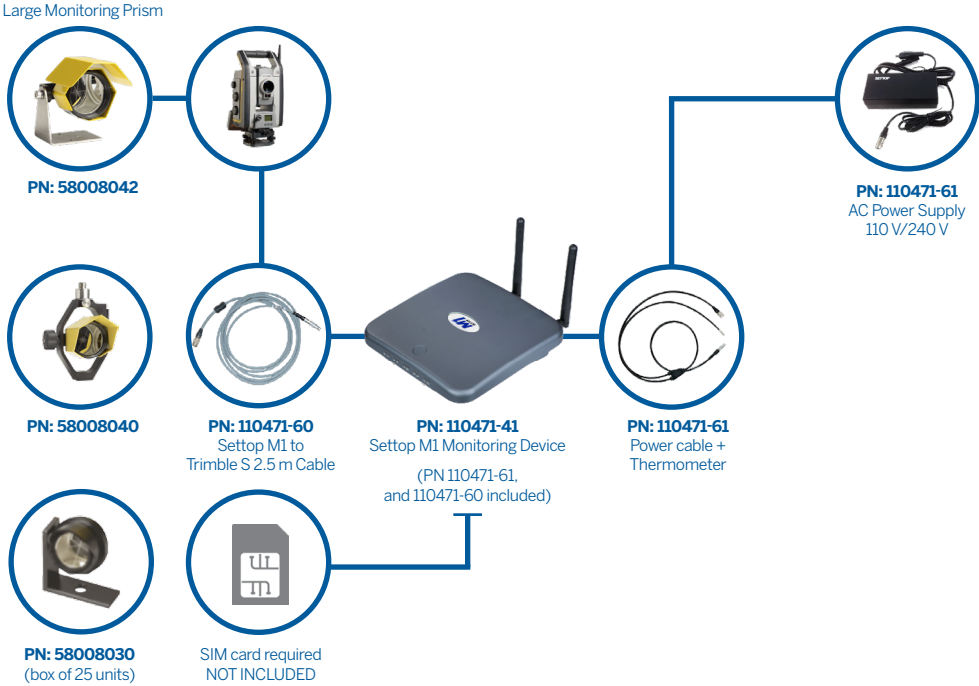
The Settop M1 easily connects to the IST Cloud service via its in-built 4G cellular modem. When your project requires Ethernet connectivity the Settop M1 connects to the octoHub, an optional accessory. The octoHub includes several additional communication ports enabling connection of extra monitoring sensors.

Advantages

NO STATIC IP NEEDED	✓
INTELLIGENT SETTOP CONNECT (SETTOP IST CONNECT)	✓
WATCHDOG & ADMINISTRATION OF ENERGY	✓
AUTONOMOUS MONITORING OF CYCLES FROM SETTOP M1	✓
SFTP & API AVAILABLE	✓
LOW CONSUMPTION OF DATA (ONLY SENDS RESULTS OF MEASUREMENTS)	✓
MEASUREMENT DATA MEMORIZED ON INTERNAL BACKUP	✓
AUTOMATIC INSTRUMENT DETECTION	✓
RECOVERY OF UNINTERRUPTED DATA IN CASE OF INTERNET CONNECTION LOSS	✓

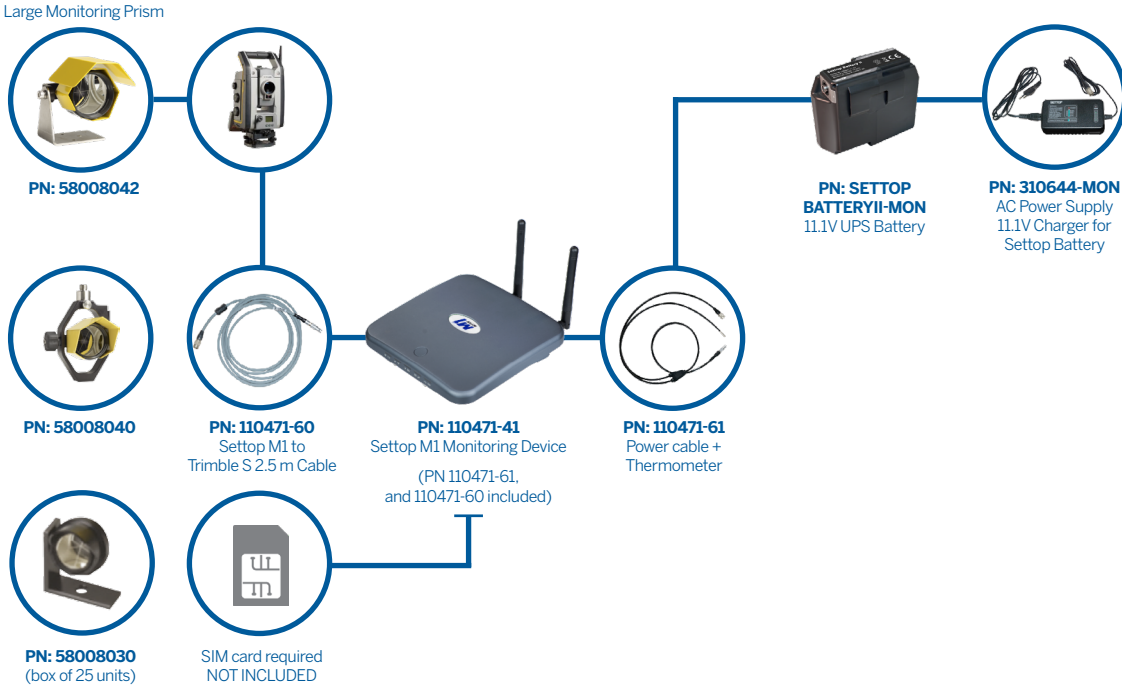
INSTALLATION SCHEME

Option 1: Standard configuration with Trimble S series



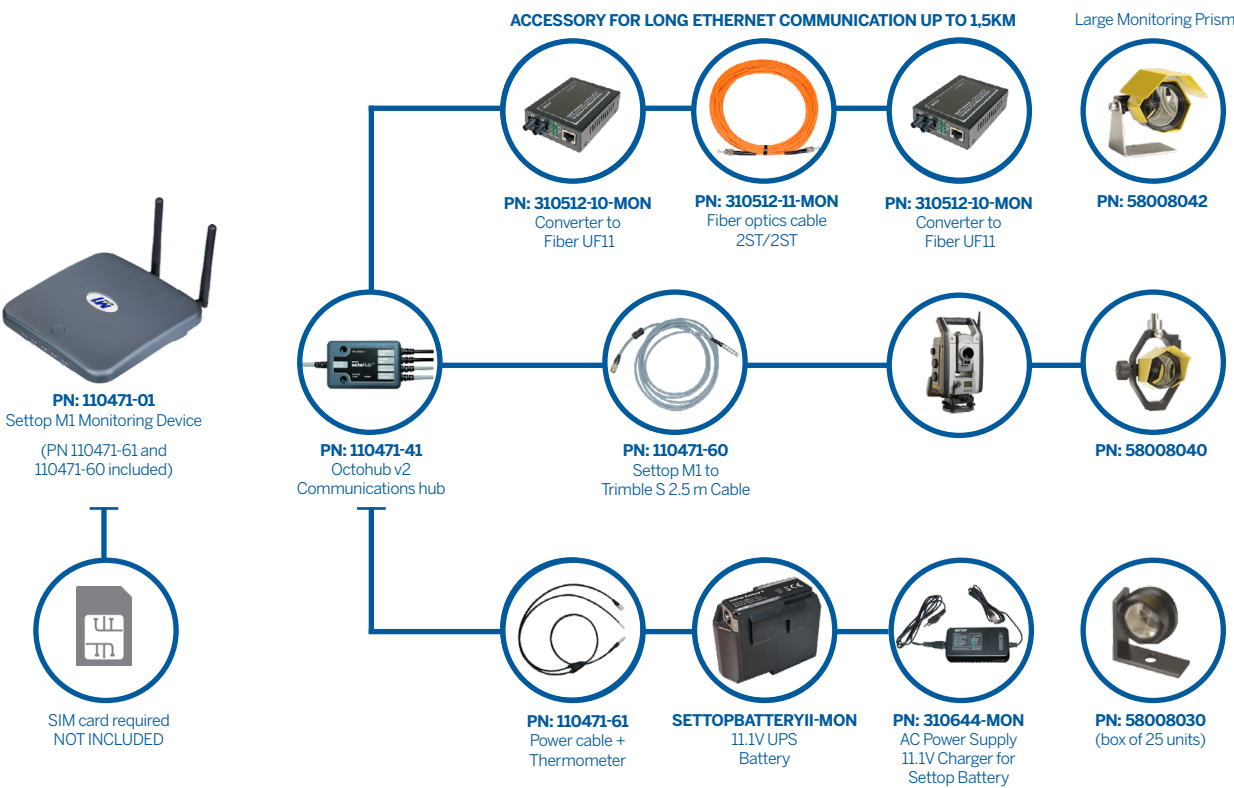
INSTALLATION SCHEME

Option 2: Trimble S series configuration with UPS (Uninterrupted Power Supply)



INSTALLATION SCHEME

Option 3: Standard S series configuration with OctoHub, UPS, and Optic Fiber





Settop M1 TOTAL STATION CONTROLLER FOR REAL-TIME MONITORING

Electrical & Operating Requirements

External Power: 12 – 30 V DC

Power:

All components activated at full power: 4.4 W

GSM reception mode: 5.6 W

GSM mode & radio off: 3.6 W

Operating temperature –40° C to 75° C

Storage temperature –55° C to 85° C

Random vibrate MIL-STD 810F (7.7 g RMS)

Vibrate SAEJ1211 (4 g)

Bump/Shock IEC 68-2-27 (30 g)

IP67

Settop M1 Communication Ports

1 RS232 Power In/Out

1 USB OTG / Host port Power In/Out

2 connectors for cellular antennas

1 Slot SIM card

1 Slot MicroSD card

octoHub v2 Ports

1 USB Host + Power Out (Total Station)

1 RS232 + Power In

1 Ethernet

1 Settop M1

1 External power output

Connections

4G Cellular Modem

Twelve Band FDD LTE: 700 / 800 / 850 / 900 / 1700 / 1800 / 1900 / 2100 / 2600 MHz

Seven Band UMTS: 800 / 850 / 900 / 1700 / 1800 / 1900 / 2100 MHz

Connections

Quad Band GSM: 850 / 900 / 1800 / 1900 MHz

FDD LTE: DL: max 10.2 Mbps, UL: max 5.2 Mbps

HSDPA+ data: DL: max. 7.2 Mbps, UL: max. 5.76 Mbps

UMTS data: DL: max. 384 kbps, UL: max. 384 kbps

EDGE data: DL: max. 237 kbps, UL: max. 118 kbps

GPRS data: DL: max. 86 kbps, UL: max. 43 kbps

GSM/CSD data transmission: 14.4 kbps

Wi-Fi

IEEE 802.11b/g/n

Bluetooth® 4.1 with BLE

(Bluetooth is not available with Japan version)

2.0 + ERD (Enhanced Data Rate) wireless technology

Size and Weight

Size:

Width: 13.8 cm

Depth: 13.8 cm

Height: 3.5 cm

Weight: 0.6 kg

Ordering Information

Part No.	Description
110471-01	Settop M1 Monitoring Controller with 4G cellular modem technology includes: AC/DC Power Supply 110 V – 240 V Trimble Total Station to Settop M1 2.5 m cable External temperature sensor and cable
110471-41	octoHub port multiplier and communications hub accessory for the Settop M1

Specifications subject to change without notice.

The octoHub v2 opens up a wide range of possibilities to connect to numerous sensors and devices via the Settop M1 for automated monitoring projects. With the multiple communication ports integrated into a single device, you can forget about complex cable installations and losing data from a specific sensor. The octoHub ensures you have all of the data that you need within easy reach for quick and easy analysis for monitoring projects.

For more information on the octoHub v2 view this [datasheet](#)



octoHub Communications Device

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