

Trimble TSC710

CONTROLLER



Big screen, full keyboard,
powerful connectivity.
A premium solution for
everyday productivity.

Connect to a better way to work

Productive

You need tools that can keep up with the increasingly demanding requirements of your work. The Trimble® TSC710 controller gives you the power to stay ahead and in control.

The TSC710's high-performance processor seamlessly operates complex software, maximizing productivity and data handling.

Extend uptime with a high-capacity battery that optimizes power management for continuous operation.

Durable

The TSC710 boasts a large, sunlight-readable 7" screen while remaining rugged and durable enough to handle harsh field conditions—from mud and heat to extreme cold.

Data entry is a breeze thanks to the full keyboard and multi-touch screen. The TSC710 is built for the outdoors, providing advanced processing power and connectivity wherever you need it.

Versatile

The TSC710 offers the processing power, memory, and connectivity to handle your data with ease.

5G WWAN mobile data makes transferring even large files a snap. Secure efficient data exchange via Trimble Connect® or WorksManager software to ensure seamless field-to-office connectivity.

Achieve precise location accuracy and stay on schedule by connecting to a local base station with Trimble's base station service.



Trimble TSC710

Controller

Physical specifications

| | |
|--|--|
| Size | 305.2 mm × 193.0 mm × 47.3 mm (12.0" × 7.6" × 1.6") |
| Weight | 1270 g (2.8 lbs) excluding optional removable battery, Trimble Empower™ module, pole bracket and other accessories |
| Housing | Sabic LNP D351+ BASF 1170A11U overmold |
| ENVIRONMENTAL SPECIFICATIONS (MEETS OR EXCEEDS) | |
| Operating temperature | MIL-STD-810H, Method 501.7 & 502.7, Procedure II -30 °C to +60 °C (-22 °F to +140 °F) |
| Storage temperature | MIL-STD-810H, Method 501.7 & 502.7, Procedure I -40 °C to +70 °C (-40 °F to +158 °F) |
| Startup temperature | MIL-STD-810H, Method 501.7 & 502.7, Procedure I -40 °C to +70 °C (-40 °F to +158 °F) |
| AC adapter / charging temperature | 0 °C to +45 °C (32 °F to 113 °F) |
| Dust | IP6x: 8 hours with blowing talcum powder (IEC-529) |
| Water | IPx8: immersion, up to 1 m (3.2 ft) depth for 2 hours (IEC-529) |
| Transit drop | MIL-STD-810H, Method 516.8, Procedure IV 26 drops (each face, edge & corner) at room temperature from 1.22 m (4 ft) onto plywood and concrete 6 faces at low and high temps (-30 °C and +60 °C) (-22 °F and +140 °F) Ball drop similar to IEC 60950-1, 50 mm steel ball dropped 0.5 m on touch panel only—5 drops, center and 4 corners |
| Humidity | MIL-STD-810H, Method 507.6 Procedure II 90% RH temp cycle 30 °C / 60 °C (86 °F / 140 °F) |
| Vibration | MIL-STD-810H, Method 514.8 Procedures I & II General minimum integrity and loose cargo test |
| Altitude (Low pressure) | MIL-STD-810H, Method 500.6, Procedures I (storage), II (operating) and III (rapid decompression) Operational at 9,144 m (30,000 ft) at 5 °C / 41 °F, Storage at 12,192 m (40,000 ft) at -30 °C / -22 °F Rapid decompression 2,438m (8,000 ft) to 12,192 m (40,000 ft) in <15 seconds at 25 °C / 77 °F |
| Temperature shock | MIL-STD-810H, Method 503.7, Procedure I-C Survives cycles between -30 °C and +60 °C (-22 °F and +140 °F) |
| Solar exposure | MIL-STD-810H, Method 505.7, Procedures I & II Survives prolonged solar exposure |
| Salt spray | ASTM B117 5% salt solution, 96 hrs |



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Electrical specifications

| | |
|--------------------------------------|---|
| Processor | Qualcomm® QCS6490 |
| Memory | LPDDR4 8GB GB |
| Storage | 128 GB UFS Flash Memory |
| Operating system | Android™ 14 |
| Batteries | Internal Li-Ion 4600 mAh/7.2 V nominal capacity with optional user replaceable Li-Ion battery pack |
| Battery life | RTS usage 10 hours or GNSS RTK usage 10 hours (Depending on display settings, connectivity, data processing, ambient temperature, etc.) |
| Charging time | Full-charge 3.5 hours, 0–50 % charge in 1.5 hours |
| Power input | 5 V, 9 V, 12 V / 3 A charging, USB-PD 2.0 compliant with Type C connector |
| Notification LED | Battery status, Shift, Fn, Ctrl, AGr, Caps Lock, Search, and Cursor Lock LED indicator |
| Display | 7" landscape HD (1280x800 px) 215 DPI display 800 cd/m ² (nits) sunlight readable LED backlight, projective capacitive multi-touch touchscreen with stylus, finger, and glove modes |
| Keyboard | International backlit alpha-numeric and QWERTY with Fn keys (11 physical + multiple Fn, Shift & AGr key combinations) |
| Audio | Mono speaker and dual microphones with noise-canceling technology |
| External speaker / microphone | USB-C or Bluetooth® headsets supported |
| I/O | USB-C for charging and USB 3.1 Gen 1 data transfer USB-PD 2.0 supports charger inputs up to 5 V/9 V/12 V (3A) Display port alternate mode via USB Type-C |
| WWAN | 5G, worldwide LTE 4G & UMTS 3G in regions where it is available AT&T and Verizon certified. NanoSIM card. |
| Wi-Fi® | Wi-Fi 6, 2.4 GHz (802.11 b/g/n/ax) & 5.0 GHz (802.11 a/n/ac/ax) |
| Bluetooth | Bluetooth 5.2, BLE 5, Class 1 |
| Near field coms | NFC NXP PN-7160, Reader/Writer Mode |
| Camera | Rear camera: 16 MP auto-focus with LED flash |
| GNSS | Integrated Sierra Wireless EM9291 Dual Frequency L1 C/A, GPS, GLONASS, BeiDou, Galileo, QZSS 4M Horizontal RMS in favorable conditions |
| Sensors | Ambient light sensor, e-Compass, accelerometer, gyro sensor, temperature sensors, power/current sensor |

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| Security | |
|------------------------|--|
| | Secure boot with hardware fuse protection Qualcomm Trusted Execution Environment (QTEE) Device encryption Quarterly Android security patches |
| Configurations | |
| | Trimble Empower module support 2 x module bay supports EM120, EM130 & EM940/450 radio modules |
| Certifications | |
| Country certifications | Australia, Brazil, Canada, Chile, EU, India, Japan, Kazakhstan, Mexico, New Zealand, Saudi Arabia, South Africa, South Korea, Taiwan, Thailand, UAE, UK and USA. |
| Environmental | Conflict Minerals, EU RoHS 2.0, EU REACH |
| Compatible software | |
| | Trimble Access™ or Trimble Siteworks software version 1.80 and later |
| | Trimble Connect or WorksManager software |
| | Android 14 applications |

Contact your local Trimble Authorized Dealer
for more information

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