

# 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.



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### Physical specifications

|                |                                                                                                                    |
|----------------|--------------------------------------------------------------------------------------------------------------------|
| <b>Size</b>    | 305.2 mm × 193.0 mm × 47.3 mm (12.0" × 7.6" × 1.6")                                                                |
| <b>Weight</b>  | 1270 g (2.8 lbs) excluding optional removable battery, Trimble Empower™ module, pole bracket and other accessories |
| <b>Housing</b> | Sabic LNP D351+ BASF 1170A11U overmold                                                                             |

### ENVIRONMENTAL SPECIFICATIONS (MEETS OR EXCEEDS)

|                                          |                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Operating temperature</b>             | MIL-STD-810H, Method 501.7 & 502.7, Procedure II<br>-30 °C to +60 °C (-22 °F to +140 °F)                                                                                                                                                                                                                                                         |
| <b>Storage temperature</b>               | MIL-STD-810H, Method 501.7 & 502.7, Procedure I<br>-40 °C to +70 °C (-40 °F to +158 °F)                                                                                                                                                                                                                                                          |
| <b>Startup temperature</b>               | MIL-STD-810H, Method 501.7 & 502.7, Procedure I<br>-40 °C to +70 °C (-40 °F to +158 °F)                                                                                                                                                                                                                                                          |
| <b>AC adapter / charging temperature</b> | 0 °C to +45 °C (32 °F to 113 °F)                                                                                                                                                                                                                                                                                                                 |
| <b>Dust</b>                              | IP6x: 8 hours with blowing talcum powder (IEC-529)                                                                                                                                                                                                                                                                                               |
| <b>Water</b>                             | IPx8: immersion, up to 1 m (3.2 ft) depth for 2 hours (IEC-529)                                                                                                                                                                                                                                                                                  |
| <b>Transit drop</b>                      | MIL-STD-810H, Method 516.8, Procedure IV<br>26 drops (each face, edge & corner) at room temperature from 1.22 m (4 ft) onto plywood and concrete<br>6 faces at low and high temps (-30 °C and +60 °C) (-22 °F and +140 °F)<br>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 |
| <b>Humidity</b>                          | MIL-STD-810H, Method 507.6 Procedure II 90%<br>RH temp cycle 30 °C / 60 °C (86 °F / 140 °F)                                                                                                                                                                                                                                                      |
| <b>Vibration</b>                         | MIL-STD-810H, Method 514.8 Procedures I & II<br>General minimum integrity and loose cargo test                                                                                                                                                                                                                                                   |
| <b>Altitude (Low pressure)</b>           | MIL-STD-810H, Method 500.6, Procedures I (storage), II (operating) and III (rapid decompression)<br>Operational at 9,144 m (30,000 ft) at 5 °C / 41 °F,<br>Storage at 12,192 m (40,000 ft) at -30 °C / -22 °F<br>Rapid decompression 2,438m (8,000 ft) to 12,192 m (40,000 ft) in <15 seconds at 25 °C / 77 °F                                   |
| <b>Temperature shock</b>                 | MIL-STD-810H, Method 503.7, Procedure I-C<br>Survives cycles between -30 °C and +60 °C (-22 °F and +140 °F)                                                                                                                                                                                                                                      |
| <b>Solar exposure</b>                    | MIL-STD-810H, Method 505.7, Procedures I & II<br>Survives prolonged solar exposure                                                                                                                                                                                                                                                               |
| <b>Salt spray</b>                        | ASTM B117 5% salt solution, 96 hrs                                                                                                                                                                                                                                                                                                               |



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### Electrical specifications

|                                      |                                                                                                                                                                                          |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Processor</b>                     | Qualcomm® QCS6490                                                                                                                                                                        |
| <b>Memory</b>                        | LPDDR4 8GB GB                                                                                                                                                                            |
| <b>Storage</b>                       | 128 GB UFS Flash Memory                                                                                                                                                                  |
| <b>Operating system</b>              | Android™ 14                                                                                                                                                                              |
| <b>Batteries</b>                     | Internal Li-Ion 4600 mAh/7.2 V nominal capacity with optional user replaceable Li-Ion battery pack                                                                                       |
| <b>Battery life</b>                  | RTS usage 10 hours or GNSS RTK usage 10 hours<br>(Depending on display settings, connectivity, data processing, ambient temperature, etc.)                                               |
| <b>Charging time</b>                 | Full-charge 3.5 hours, 0–50 % charge in 1.5 hours                                                                                                                                        |
| <b>Power input</b>                   | 5 V, 9 V, 12 V / 3 A charging, USB-PD 2.0 compliant with Type C connector                                                                                                                |
| <b>Notification LED</b>              | Battery status, Shift, Fn, Ctrl, AGr, Caps Lock, Search, and Cursor Lock LED indicator                                                                                                   |
| <b>Display</b>                       | 7" landscape HD (1280x800 px) 215 DPI display<br>800 cd/m² (nits) sunlight readable LED backlight, projective capacitive multi-touch<br>touchscreen with stylus, finger, and glove modes |
| <b>Keyboard</b>                      | International backlit alpha-numeric and QWERTY with Fn keys<br>(11 physical + multiple Fn, Shift & AGr key combinations)                                                                 |
| <b>Audio</b>                         | Mono speaker and dual microphones with noise-canceling technology                                                                                                                        |
| <b>External speaker / microphone</b> | USB-C or Bluetooth® headsets supported                                                                                                                                                   |
| <b>I/O</b>                           | USB-C for charging and USB 3.1 Gen 1 data transfer<br>USB-PD 2.0 supports charger inputs up to 5 V/9 V/12 V (3A)<br>Display port alternate mode via USB Type-C                           |
| <b>WWAN</b>                          | 5G, worldwide LTE 4G & UMTS 3G in regions where it is available<br>AT&T and Verizon certified. NanoSIM card.                                                                             |
| <b>Wi-Fi®</b>                        | Wi-Fi 6, 2.4 GHz (802.11 b/g/n/ax) & 5.0 GHz (802.11 a/n/ac/ax)                                                                                                                          |
| <b>Bluetooth</b>                     | Bluetooth 5.2, BLE 5, Class 1                                                                                                                                                            |
| <b>Near field coms</b>               | NFC NXP PN-7160, Reader/Writer Mode                                                                                                                                                      |
| <b>Camera</b>                        | Rear camera: 16 MP auto-focus with LED flash                                                                                                                                             |
| <b>GNSS</b>                          | Integrated Sierra Wireless EM9291   Dual Frequency L1 C/A, GPS, GLONASS, BeiDou, Galileo, QZSS   4M Horizontal RMS in favorable conditions                                               |
| <b>Sensors</b>                       | Ambient light sensor, e-Compass, accelerometer, gyro sensor, temperature sensors, power/current sensor                                                                                   |

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| Security               |                                                                                                                                                                  |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | Secure boot with hardware fuse protection<br>Qualcomm Trusted Execution Environment (QTEE)<br>Device encryption<br>Quarterly Android security patches            |
| Configurations         |                                                                                                                                                                  |
|                        | Trimble Empower module support<br>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                                                                                                                                          |

|                                                                                  |                                                                                          |                                                                                        |                                                                                                                                                              |
|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div>Contact your local Trimble Authorized Dealer<br/>for more information</div> | <b>NORTH AMERICA</b><br>Trimble Inc.<br>10368 Westmoor Dr<br>Westminster CO 80021<br>USA | <b>EUROPE</b><br>Trimble Germany GmbH<br>Am Prime Parc 11<br>65479 Raunheim<br>GERMANY | <b>ASIA-PACIFIC</b><br>Trimble Navigation<br>Singapore PTE Limited<br>3 HarbourFront Place<br>#13-02 HarbourFront Tower Two<br>Singapore 099254<br>SINGAPORE |
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