

# TECHNICAL MANUAL

## TC80 Controller

### TERSUS GNSS INC.

Rm 601, Bldg E2, No. 88, Jinjihu Ave, Suzhou, China

## Trademark: Tersus GNSS

### Model: TC80 Controller

#### FUNCTION

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The TC80 controller is a rugged multi-function data controller with a 5.5" sunlight-readable HD touchscreen design and alphanumeric keypad. It is equipped with a powerful octa-core processor and Android operating system, perfect for adapting to Tersus survey software.

With a professional IP68 rating, it is strong and reliable for difficult outdoor environments. The high-capacity lithium battery provides 14 hours of surveying work in the field.

#### Key Features

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- ✓ 5.5-inch sunlight-readable HD touchscreen
- ✓ Octa-core 2.0GHz CPU
- ✓ Android 11 operating system
- ✓ 6GB RAM+64GB ROM
- ✓ 13MP rear camera
- ✓ IP68 certified grade, water/dust proof
- ✓ 7700mAh battery
- ✓ Wi-Fi, Bluetooth, NFC, 4G
- ✓ USB Type-C



# Tersus GNSS TC80

## Technical Specifications

### System

Operating System:	Android 11
CPU:	Octa-core 2.0GHz
Memory:	6GB RAM+64 ROM
External Storage:	Micro SD, up to 256G
Display:	5.5" sunlight-readable capacitive touch screen
Resolution:	720*1440
Brightness:	500 cd/m <sup>2</sup>
Notification Method:	Sound, Vibration, LED prompt
Audio:	Speaker, Volume 90db±3db (Test Distance 10cm)
Camera:	Rear 13 Megapixels AutoFocus
Flash Light:	High-Brightness LED Flash

### GNSS

Signal Tracking:	GPS, BDS, GLONASS, GALILEO
Channels:	80

### Electrical

Battery:	7700mAh, Supports fast charging
Working Time(Typical):	14hours <sup>(1)</sup>
Charging Ways:	USB Type-C Fast Charge

### Physical

Dimension:	221.3*77.7*19.6mm <sup>(2)</sup>
Weight:	320g (Including Battery) <sup>(2)</sup>
Operating Temperature:	-20 °C ~ +60 °C
Storage Temperature:	-30 °C ~ +70 °C
Humidity:	5% ~ 95%
Dustproof & Waterproof:	IP68
Shock:	1.5m Drop onto Concrete(6 Sides)
Vibration:	MIL-STD-810G, FIG 514.6C-1
Electrostatic Protection:	±15kV Air Discharge, ±8kV Contact Discharge

### Communication

Cellular Band:	LTE WCDMA GSM
Wi-Fi:	IEEE 802.11 a/b/g/n/ac 2.4G&5G Double Frequency
Bluetooth:	BT5.0 (BLE)
NFC:	Protocol of ISO14443A/B, ISO15693, Readable distance 0~5cm
USB:	USB Type-C, Supports OTG
Sensors:	Gravity Acceleration Sensor, Geomagnetic Sensor, Light and Distance Sensor

Note:

- (1) The working time of the battery is related to the working environment, working temperature and battery life.
- (2) The actual size/weight may vary depending on the manufacturing process and measurement method.
- (3) The TC80 work with PCB LAYOUT GT50 - BEIJING SPEEDATA – TAC: 86441305

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