

Key features

0

- Configurable receiver, scalable for future requirements.
- Available in base & rover, rover only, or base only configurations.
- Trimble[®] Inertial Platform[™] (TIP[™]) technology for magnetically immune IMU-based tilt compensation.
- Trimble ProPoint* GNSS positioning engine for improved accuracy and productivity in challenging GNSS conditions.
- Trimble Maxwell[™] 7 GNSS ASIC.
- 9 GB internal memory.
- Trimble xFill[®] correction outage technology.

 Supports Trimble CenterPoint[®] RTX corrections for RTK level accuracy worldwide via satellite/IP.

Tilt

Compensation

0

- Military-grade ultra-rugged design, IP68 rating.
- Optimised for Trimble Access[™]
 field software.

Find out more at: geospatial.trimble.com/R780



DATASHEET





PERFORMANCE SPECIFIC	ATIONS					
GNSS TECHNOLOGY						
	Constellation agnostic, flexible signal tracking, improved measurement integration with Trimble ProPoint GNSS te					
		raceability with TIP technology IMU-based tilt compensation				
	Trimble RTX* worldwide corrections					
	Advanced Trimble Maxwell 7 technology					
	Trimble EVEREST [™] Plus multipath signal rejection					
	Spectrum Analyzer to troubleshoot GNSS jamming					
	Anti-spoofing capabilities					
	Japanese LTE Filtering below 1510 MHz allows antennas to be used 100 m away from Japanese LTE cell tower					
	Iridium Filtering above 1616 MHz allows the antenna to be	e used 20 m away from Iridium transfer				
SATELLITE TRACKING						
	GPS: L1C, L1 C/A, L2E (L2P), L2C, L5 GLONASS: L1C/A, L1P. L2C/A, L2P, L3					
	Galileo: E1, E5A, E5B and E5AltBOC, E6 ²					
	BeiDou: B1, B2, B3, B1C, B2A					
	QZSS: L1 C/A, L1C, L1S, L2C, L5, LEX/L6					
	IRNSS: L5					
	SBAS: L1 C/A (EGNOS/MSAS GAGAN/SDCM), L1 C/A and L5 (WAAS)					
	L-Band: Trimble RTX					
POSITIONING PERFORMA	NCE ³					
STATIC GNSS SURVEYING						
High-Precision Static						
	Horizontal	3 mm + 0.1 ppm RMS				
	Vertical	3.5 mm + 0.4 ppm RMS				
Static and Fast Static						
	Horizontal	3 mm + 0.5 ppm RMS				
	Vertical	5 mm + 0.5 ppm RMS				
REAL TIME KINEMATIC SURV	EYING					
Single Baseline < 30 km	Horizontal	8 mm + 1 ppm RMS				
	Vertical	15 mm + 1 ppm RMS				
Network RTK ⁴	Vortiour					
	Horizontal	8 mm + 0.5 ppm RMS				
	Vertical	15 mm + 0.5 ppm RMS				
	RTK start-up time for specified precisions⁵	2 to 8 seconds				
TRIMBLE INERTIAL PLATFOR	M (TIP) TECHNOLOGY					
TIP Compensated Surveying ⁶						
	Horizontal	RTK + 8 mm + 0.5 mm/° tilt (up to 30°) RMS				
	Horizontal	RTX + 8 mm + 0.5 mm/° tilt (up to 30°) RMS				
IMU Integrity Monitor	Bias monitoring	Temperature, age and shock				
TRIMBLE RTX CORRECTION S	SERVICES					
CenterPoint RTX ⁷	Horizontal	2 cm RMS				
	Vertical	5 cm RMS				
	RTX convergence time for specified precisions in					
	Trimble RTX Fast regions	<1 min				
	RTX convergence time for specified precisions in non RTX Fast regions	< 3 min				
	RTX QuickStart convergence time for specified precisions	< 5 min				
TRIMBLE xFILL ⁸						
	Horizontal	RTK ⁹ + 10 mm/minute RMS				
	Vertical	RTK ⁹ + 20 mm/minute RMS				
TRIMBLE xFILL PREMIUM ⁸						
	Horizontal	3 cm RMS				
	Vertical	7 cm RMS				



DATASHEET

Trimble R780 GNSS System



PHYSICAL Dimensions (W×H) 13.9 cm x 13 cm (5.5 in x 5.1 in) including connectors Weight 1.55 kg (3.42 lb) receiver only including radio and battery Temperature ¹¹ Operating -40 °C to +65 °C (-40 °F to +149 °F) Storage -40 °C to +75 °C (-40 °F to +167 °F) Humidity 100%, condensing Ingress protection IP68 Certified per IEC-60529: waterproof/dustproof Shock and vibration Pole drop Shock Non-operating: 75 Gs at 6 msec Shock Operating: 40 Gs at 10 msec Vibration Vibration ELECTRICAL Internal ELECTRICAL Internal ELECTRICAL External ELECTRICAL Internal ELECTRICAL External ELECTRICAL External	POSITIONING PERFORMANC	E ³ Cont.				
Vertical 0.50 m + 1 pm RMS VARDWARE SBA5" PHYSICAL I.39 cm x 13 cm (5.5 m x 5.1 m) including connectors Vertical L55 kg (3.42 Lb) receiver only including connectors Vertical L55 kg (3.42 Lb) receiver only including connectors Vertical 40 °C to 465 °C (40 °T to 146 °T) Vertical 40 °C to 465 °C (40 °T to 146 °T) Vertical PAS Central cap km (5.6 m x 5.1 m) Regress_protection 40 °C to 465 °C (40 °T to 146 °T) Stock PAS Central cap km (5.6 m x 5.1 m) Stock PAS Central cap km (5.6 m x 5.1 m) Stock PAS Central cap km (5.6 m x 5.1 m) Stock Operating, 75 G s.4 Consec Vertical Rechargeable, removable L tituum-ion battery in internal Vertical Rechargeable, removable L tituum-ion battery in internal Vertical Pas	CODE DIFFERENTIAL GNSS POS	ITIONING				
typically < 5 m 3DRMS		Horizontal	0.25 m + 1 ppm RMS			
ARDWARE PHYSICAL Dimensions (W+H) I.5.9 cm x i.3 cm (5.5 in x 5.1 in) including connectors Weight I.5.8 vg (3.4 zb) receiver only including connectors weight Operating		Vertical	0.50 m + 1 ppm RMS			
PHYSICAL 31.9 cm x13 cm (3.5 lin x 5.1 in) including connectors Weight 1.55 kg (3.42 lb) receiver only including radio and battery Temperature ³¹ Operating 40 °C to +55 °C (-40 °F to +167 °F) Humidity 100%, condensing Ingress protection Ingress protection Instances of the state of the stat		SBAS ¹⁰	Typically < 5 m 3DRMS			
PHYSICAL 31.9 cm x13 cm (3.5 lin x 5.1 in) including connectors Weight 1.55 kg (3.42 lb) receiver only including radio and battery Temperature ³¹ Operating 40 °C to +55 °C (-40 °F to +167 °F) Humidity 100%, condensing Ingress protection Ingress protection Instances of the state of the stat	HARDWARE					
Dimensions (W+I) 13 9 cm x 13 cm (5.5 in x 5.1 in) including connectors Weight 0.5 (3.42 b) receiver only including colo and battery Impensions (W-II) Operating -40 °C to +65 °C (-40 °F to +19 °F, 64 °C °F, 7 Humidity 100% condensing 100% condensing Ingress protection Insubmersion for 1 hour) 100% condensing Shock and vibration Insubmersion for 1 hour) 100% condensing Shock Operating: 7.05 G at Grasse 100% condensing Shock Operating: 7.05 G at Grasse 100% condensing Shock Operating: 7.05 G at Grasse 100% condensing ELECTRICAL Febrahose (Stresse (Str						
Weight 155 kg (3.42 lb) receiver only including radue and battery Temperature* Operating 40 °C to +55 °C (40 °F to +149 °F) Storage 40 °C to +55 °C (40 °F to +145 °F) Hundidly 100% condensing Ingress protection 10°E Condensing Stock 10°E Condensing Stock Non-operating 75 Gs at 6msec Stock Operating 400 Gs at 10°msec Valuation Med 400, Cit Stock Valuation Med 400, Cit Stock Stock Operating 400 Gs at 10°msec Valuation Med 400, Cit Stock Valuation Med 400, Cit Stock Stock Operating 200, Cit Stock EECCTRICAL Hermal EECTRICAL Internal battery operation and is more than 112 Vol EECTRICAL External External External Operating circuitry External External Operating circuitry Integrated charging circuitry Valuation on Port 11 (Cr) Operating circuitry External Operating 200, Shutdown optimised for 12 Vlead acid Marging circuitry Shouks valuan DS Maxinnum 28 VOC, shutdown opti		13.9 cm x 13 cm (5.5 in x 5.1 in) inclu	iding connectors			
Temperature ¹¹ Operating -40 °C to +65 °C (-40 °F to +149 °F) Storage -40 °C to +75 °C (-40 °F to +149 °F) Ingress protection IPF68 Cortified per IEC-60529: waterproof/dustproof Shock and vibration Pole drop Shock and vibration Pole drop Shock Stand vibration Mil-Stat-300, FIG 5A4 6F1 Cat 24, Mil-Std-2020, FIG 214-1, Condition D ELECTRICAL Internal Rechargeable, removable Lithum-ion battery in internal battery vibrates as UPS during an ext power source along as source cat support the power drain and is more source as long as source cat support the power drain and is more source as long as source cat support the power drain and is more drain and is more source as long as source cat support with over-voltage protection on Port 1 (Printernal battery vibrates as UPS columbar vibrates and UPS columbar vibrates with internal columbar vibrates and UPS columbar vibrates vibrates vibrates and UPS columbar vibrates with remperature Description 3.2 W in rovere mode with initernal receive randin ¹⁴			0			
Operating -40 °C to -65 °C (-40 °F to -149 °F) Storage -40 °C to -65 °C (-40 °F to -149 °F) Humidity 100%, condensing Ingress protection IP68 Certified per IEC-6025? waterproof/dustproof Stock and wibration Pole drop Stock Designed to survive a 2 m (-6.6 ft) pole drop onto concrete Shock Operating: 75 Gs at 6msec Shock Operating: 40 Gs at 10msec Vibration Wibrition ELECTRICAL Rechargeable, removable Lithum-ion battery in internal battery compartment ELECTRICAL February will charge from activity in internal battery compartment ELECTRICAL February will charge from activity in with removable Lithum-ion battery in internal battery operates as a UPS during an ext power source failure Internal Internal battery operates as a UPS during an ext power source failure Internal battery operates A Bechargeable, removable Lithum-ion battery in internal External External for internal battery operates as a UPS during an ext power source failure Internal battery operates A Bechargeable, removable Lithum-ion battery in internal External External for internal battery operates A Bechargeable, removable Lithum-ion failithinternal receive adora d	•	1.55 kg (5.42 lb) receiver only including radio and battery				
Storage 40 °C to 745 °C (-40 °F to -167 °F) Humidity 00% condursing Ipreses protection 100% condursing Stock and vibration Peel or p Stock and vibration Stock N Stock A Operating -40 G as it formse Stock N Operating -40 G as it formse Stock N Operating -40 G as it formse Stock N Operating -40 G as it formse Vibration Mil-Std 810G, FIG 514 6E1 Cat 24, Mil-Std-202G, FIG 214.1, Condition D ELECTRICAL Termal ELECTRICAL Rechargeable, removable Lithum-ion battery in internal battery comparimenta ELECTRICAL Fitternal battery internal batt	Temperature	Operating -40 °C to ±65 °C (-40 °E to ±140 °E)				
Humidity 100% condensing Ingress protection IP68 Certified per IEC-60529; waterproof/dustproof Shock Non-operating: 75 Gs at Ginsee Shock Non-operating: 75 Gs at Ginsee Shock Operating: 40 Gs at Omsee Vibration Mil-Std-810G, FIG 514.6E-1 Cat 24, Mil-Std-202G, FIG 214-1 Condition D ELECTRICAL Ferral Rechargeable, removable Lithium-ion battery viii in internal battery compartment Internal Rechargeable, removable Lithium-ion battery viii in internal battery compartment Internal Rechargeable, removable Lithium-ion battery viii charge from external power source along as source or support the power drain and is more than 18 VDC Integrated charging circuitry Ferral Dower input with over-voltage protection on Port 1 (7-pin Lemo 2-key) Minimum 108 V. Maximum 28 VDC, shutdown optimised for 12 V lead acid battery operation Decentral power input with over-voltage protection on Port 1 (7-pin Lemo 2-key) Operating times on internal battery S2 W in rover mode with internal receiver ador 52 W in base mode with internal occeiver ador S2 W in rover mode with internal receiver ador 52 W in base mode with internal receiver ador S2 W in rover mode with internal receiver addra 53 Ourus varies with temperature Base station						
Ingress protection P68 Certified per IEC-60229, waterproof/dustproof (In submersion for 1 hour) Shock and vibration Pole drop Shock Non-operating: 75 Gs at Grissee Shock Operating: 40 Gs at JOmsee Vibration ELECTRICAL ELECTRICAL U Internal Internal Internal Rechargeable, removable Lithium-ion battery in internal battery operation U chargeable, removable Lithium-ion battery in internal battery compariment Internal battery vibration ELECTRICAL ELECT	Humidity	Storage				
ing less protection in the interval in the interval of the int	-					
Pole drop Designed to survive a 2 m (6.5 ft) pole drop onto concrete Shock Non-operating: 75 0s at 6msec Shock Operating: 40 0s at 10msec Vibration Mil-Std-8106, FIG 514.6E-1 Cat 24, Mil-Std-2026, FIG 214-1, Condition D ELECTRICAL External Rechargeable, removable Lithium-ion battery in internal battery compartment Internal Rechargeable, removable Lithium-ion battery in internal battery will charge from external power source as long as source or support the power form and is more than 11.8 VDC Internal battery will charge from external power source as long as source or source training vib with over-voltage protection on Port 1 (Tot Lumo?) A Maximum 28 VDC, shutdown optimised for 12 V lead acid battery opparation Power consumption 3.2 W in rower mode with internal os WDC, shutdown optimised for 12 V lead acid battery opparation Power consumption 5.2 W in base mode with internal os W transmit radio Deceiver automatically turns on when connected to external power 5.5 hours; varies with temperature Base station 5.5 hours; varies with temperature Base station 5.5 hours; varies with temperature Base station 5.5 hours; varies with temperature Base varies Approximately 4 hours; varies with temperature Base other in the Acceses Point. Receive or transm	ngress protection					
Shock Operating: 75 Gs at 6msec Shock Operating: 40 Gs at 10msec Vibration Wil-Std-800, FIG 514 6E-1 Cat 24, Mil-Std-2026, FIG 214-1, Condition D Wil-Std-800, FIG 514 6E-1 Cat 24, Mil-Std-2026, FIG 214-1, Condition D ELECTRICAL Internal Mil-Std-800, FIG 514 6E-1 Cat 24, Mil-Std-2026, FIG 214-1, Condition D ELECTRICAL Internal Provide Cat 24, Mil-Std-2026, FIG 214-1, Condition D ELECTRICAL Internal Provide Cat 24, Mil-Std-2026, FIG 214-1, Condition D ELECTRICAL Rechargeable, removable Lithium-ion battery in internal battery comparison as UPS during an ext power source along as source ca support the power data and is more than 118 VDC Integrated charging circuitry External Power input with over-voltage protection on Port 1 (7-pin Lemo 2-key) Winternal Power input with over-voltage protection on Port 1 (Lemo) Receiver automatically turns on when connected to external power Power consumption 22 Win rower mode with internal receive radio" 5 2 Win base mode with internal OS W transmit radio DC external power input with over-voltage protection on Port 1 (Lemo) Receiver automatically turns on when connected to external power 900 WHz systems Power consumption 32 Win rower mode with internal Cos W transmit radio DC external power input with over-voltage protection on Port 1 (Lemo) Receiver automatically turns on when connected to external power 900 WHz systems 900 WHz systems 900 WHz systems 900 WHz systems 900 WHz systems Power consumption 25 hours: varies with temperature Power USB WHF Client or Access Point. Receiver or transmit corrections. Wi-Fi b/g/n 12 5 kHz or 25 kHz spacing available Power USB WHF 21 Client or Access Point. Receiver or transmit corrections. Wi-Fi b/g/n 12 5 kHz or 25 kHz spacing available Power USB WHZ Si Let 24 KHz 02 SHz KHz or 25 kHz spacing available Power USB Power Outowal (Q50 MHz) 12 5 kHz or 25 kHz spacing available Power Outowal (Q50 MHz) 12 5 kHz or 25 kHz spacing available Power Outowal (Q50 MHz) 12 5 kHz or 25 kHz spacing available Power Ou	Shock and vibration					
Shock Wibration Operating: 40 Gs at 10msec ELECTRICAL Mi-Std-8L0G, FIG 514 6E-1 Cat 24, Mi-Std-202G, FIG 214-1, Condition D ELECTRICAL Internal Rechargeable, removable Lithium-ion battery in internal battery compartment Internal battery Internal battery Rechargeable, removable Lithium-ion battery in internal battery compartment Internal battery External power source as long as source as support the power drain and is more than 118 VDC External External power input with over-voltage protection on Port 1 (7-pin Lemo 2-key) Minimum 20 VDC, shutdown optimised for 12 V lead acid battery core supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source removal or cut off Power consumption 3.2 W in rower mode with internal receive radio? S.4 W in bower woltage protection on Port 1 (Lemo) Receiver automatically turns on when connected to external power Power consumption 3.2 W in rower mode with internal receive radio? S.4 W in Tower mode with internal 0.5 W transmit radio Operating times on internal battery? Power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) 0.5 W transmit radio Operating times on internal battery? Power consumption 5.5 hours; varies with temperature <tr< td=""><td></td><td>Pole drop</td><td>Designed to survive a 2 m (6.6 ft) pole drop onto concrete</td></tr<>		Pole drop	Designed to survive a 2 m (6.6 ft) pole drop onto concrete			
Wibration Mil-Std-SIOG, FIG 514.6E-1 Cat 24, Mil-Std-2026, FIG 214-1, Condition D ELECTRICAL Fechargeable, removable Lithium-ion battery in internal battery compartment. Internal battery will charge from external power source failure Internal battery will charge from external power source as long as source ca support the power dorian and is more than 1L8 VDC Integrated charging circuitry Minimum 28 VDC, shutdown optimised for 12 V lead acid battery concernation and is more than 1L8 VDC. External External External power input with over-voltage protection on Port 1 (7-pin Lemo 2-key) Minimum 28 VDC, shutdown optimised for 12 V lead acid battery concerner moval or cut off DC external power input with over-voltage protection on Port 1 (Lemo) Receiver automatically turns on when connected to external power power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source strong vore mode with internal cole variant acido Opperating times on internal battery ¹⁰ Fower 5.5 hours; varies with temperature Base station 4.5 Mours; varies with temperature Base station 4.5 Mil-E systems 900 MHz systems 900 MHz systems 900 MHz systems 900 HL2 systems 90		Shock	Non-operating: 75 Gs at 6msec			
ELECTRICAL Internal Rechargeable, removable Lithium-ion battery in internal battery compartment Internal battery operates as a UPS during an ext power source failure Internal battery operates as a UPS during an ext power source as long as source or support the power drain and is more than 11.8 VDC Integrated charging circuitry External External power input with over-voltage protection on Port 1 (7-pin Lerno 2-key) Minimum 28 V, Maximum 28 VDC, shutdown optimised for 12 V lead acid battery operation Power source supply (Internal/External) is hot-swap capable in the event of power source supply (Internal/External) is hot-swap capable in the event of power source supply (Internal/External) is hot-swap capable in the event of power source supply (Internal/External) is hot-swap capable in the event of power source supply (Internal/External) is hot-swap capable in the event of power source supply (Internal/External) is hot-swap capable in the event of power source supply (Internal/External) is hot-swap capable in the event of power source supply (Internal/External) is hot-swap capable in the event of power source supply (Internal/External) is hot-swap capable in the event of power source supply (Internal/External) is hot-swap capable in the event of power source supply (Internal/External power input with over-voltage protection on Port 1 (Lemo) Receiver automatically turns on when connected to external power 3.2 W in rover mode with internal 0.5 W transmit radio 25 2 W in base mode with internal 0.5 W transmit radio 3.5 hours; varies with temperature 3.0 MHz systems Approximately 4 hours; varies with temperature 3.0 MHz systems Approximately 4 hours; varies with temperature 3.0 White State S		Shock	Operating: 40 Gs at 10msec			
Internal Rechargeable, removable Lithium-ion battery in internal battery with internal battery with internal battery with the power source as long as source or support the power drain and is more than 11.8 VDC. Integrated charging circuitry External External power input with over-voltage protection on Port 1 (Crpin Lerro 2-key) (Crpin Lero 2-key) (Crpin Lerro 2-key) (Crpin Lerro 2-key) (Crp		Vibration	Mil-Std-810G, FIG 514.6E-1 Cat 24, Mil-Std-202G, FIG 214-1, Condition D			
Approximately battery compartment Internal battery operates as UPS during an ext power source failure Internal battery will charge from external power source as long as source of support the power drain and is more than 11.8 VDC Integrated charging circuitry External External power input with over-voltage protection on Port 1 (7/pin Lemo 2-key) Minimum 10.8 V. Maximum 28 VDC, shutdown optimised for 12 V lead acid battery operation Power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External OS W transmit radio Operating times on internal battery: Fower 5.5 hours; varies with temperature Base station 5.5 hours; varies with temperature 5.5 hours; varies with temperature end (Serial 1) Forpin Lemo 2-key. Power Input, USB. to RS232 serial cable. Receive	ELECTRICAL					
Internal battery operates as a UPS during an ext power source failure Internal battery operates as a UPS during an ext power source as long as source cas support the power drain and is more than 1.8 vDC Integrated charging circuitry External External power input with over-voltage protection on Port 1 (7-pin Lemo 2-key) Minimum 10.8 VMC, shutdown optimised for 12 V lead acid battery operation Power source supply (Internal/External) is hot-swap capable in the event or power source removal or out off Power consumption 3.2 W in rover mode with internal receive radio ¹² S.2 W in rover mode with internal 2.5 W transmit radio Operating times on internal battery ³³ Rover 5.5 hours; varies with temperature Base station 5.5 hours; varies with temperature 900 MHz systems Approximately 4 hours; varies with temperature 900 MHz systems Approximately 4 hours; varies with temperature 900 MHz systems Approximately 4 hours; varies with temperature 900 MHz systems Pully-integrated sealed 2.4 GHz Bluetooth module Integrated radios (optional) Fully-integrated sealed 2.4 GHz Bluetooth module Nieff Client of Access Point. Receive or transmit corrections. Wi-Fi bg/n Subtooth* wireless technology Fully-integrated sealed 2.4 GHz Bluetooth module </td <td></td> <td>Internal</td> <td></td>		Internal				
Internal battery will charge from external power source as long as source or support the power drain and is more than 11.8 VDC Integrated charging circuitry External External power input with over-voltage protection on Port 1 (7-pin Lemo 2-key) Minimum 10.8 VM. Aximum 28 VDC, shutdown optimised for 12 V lead acid battery operation Power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power consumption External battery Fower consumption 5.5 hours; varies with temperature Base station 5.5 hours; varies with tempera						
support the power drain and is more than 11.8 VDC Integrated charging circuitry External power input with over-voltage protection on Port 1 (7-pin Lemo 2-key) Minimum 10.8 V, Maximum 28 VDC, shutdown optimised for 12 V lead acid battery operation Power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) is hot-swap capable in the event o power source supply (Internal/External) power input with over-voltage protection on Port 1 (Lemo) Receiver automatically turns on when connected to external power Power consumption 3.2 W in rover mode with internal receiver adio ²⁰ 5.2 W in base mode with internal 0.5 W transmit radio Decenter automatically turns on when connected to external power 450 MHz systems Approximately 4 hours; varies with temperature automatical external power USB Wi-Fi Client or Access Point. Receive or transmit corrections. Wi-Fi bg/n Suetooth* wireless technology Fully-integrated saled 2.4 GHz Bluetooth module ntegrated radios (optional) Fully-integrated saled 2.4 GHz Bluetooth module 12.5 Hz to 25 Hz spacing available 32.6 MHz over 25 KHz spacing available 32.6 MHz over 25 KHz spacing available 32.6 MHz over 35 KHz spacing available 32.6 MHz over 35 KHz spacing available 32.6 MHz over 35 KHz spacing available 32.6 MLZ OVERACEE Set 26 OKERZ OVERACEE Set 32.6 MLZ OVERACEE Set 32.6						
Integrated charging circuitry External power input with over-voltage protection on Port 1 ("-pin Lenno 2-key) Minimum 10.8, Maximum 28 VDC, shutdown optimised for 12 V lead acid battery operation Power source removal or cut off DO external power input with over-voltage protection on Port 1 (Lemo) Receiver automatically turns on when connected to external power Power consumption 3.2 W in rower mode with internal receive radio ²² 3.2 W in nover mode with internal 0.5 W transmit radio Power consumption 5.5 hours; varies with temperature Base station 5.5 hours; varies with temperature 450 MHz systems Approximately 4 hours; varies with temperature 900 MHz systems Approximately 4 hours; varies with temperature exerv USB S.5 hours; varies with temperature wir IG Client or Access Point. Receive or transmit consoler USB wire IG Power conse virtug available wire IG Fully-integrated seled 2.4 GHz Bluetooth module Requery 25 KHz spacing available Integrated radios (optional) Wire IG 12.5 kHz or 25 kHz spacing available Sensitivity (450 MHz) 12.5 kHz or 25 kHz spacing available Commerererere <td></td> <td></td> <td></td>						
External External power input with over-voltage protection on Port 1 (7-pin Lemo 2-key) Minimum 10.8 V, Maximum 28 VDC, shutdown optimised for 12 V lead acid battery operation Power source supply (Internal/External) is hot-swap capable in the event of power source removal or cut off DC external power input with over-voltage protection on Port 1 (Lemo) Receiver automatically turns on when connected to external power Power consumption 3.2 W in rover mode with internal receive radio ²² 5.2 W in base mode with internal 0.5 W transmit radio Opperating times on internal battery ¹³ Kover 5.5 hours; varies with temperature Base station 5.5 hours; varies with temperature 3.0 W Hz systems 900 MHz systems Approximately 4 hours; varies with temperature 900 MHz systems Approximately 4 hours; varies with temperature erron (Serial 1) 7-pin Lemo 2-key, Power Input, USB optional USB to RS232 serial cable. Receiver supports RNDIS communications over USB NrFi Client or Access Point. Receive or transmit corrections. Wi-Fi b/g/n Subtooth® wireless technology Fully-integrated, fully-sealed internal 403-473 MHz; Internal 900 MHz; Rx/Tx Channel spacing (450 MHz) 114 dBm (12 dB SINAD) 450 MHz output to wore USB SUB of						
Approximately Approxim		External				
battery operation Power source supply (Internal/External) is hot-swap capable in the even or power source removal or cut off DC external power input with over-voltage protection on Port 1 (Lemo) Receiver automatically turns on when connected to external power Sciever automatically turns on when connected to external power Sciever automatically turns on when connected to external power Sciever automatically turns on when connected to external power Sciever automatically turns on when connected to external power Sciever automatically turns on when connected to external power Sciever automatically turns on when connected to external power Sciever automatically turns on when connected to external power Sciever automatically turns on when connected to external power Sciever automatically turns on when connected to external power Sciever automatically turns on when connected to external power Operating times on internal battery ¹³ Fower Sciever automatically turns on when connected to external power Sciever automatically turns on when connected to external power Operating times on internal battery ¹³ Fower Sciever automatically curns on when connected to external power Sciever automatically turns on when connected to external power Operating times on internal battery ¹³ Fower Sciever automatically curns on when power automatically approximately 4 hours; varies with tem						
Approximate Power source supply (Internal/External) is hot-swap capable in the event or power source supply (Internal/External) is hot-swap capable in the event or DC external power input with over-voltage protection on Port 1 (Lemo) Receiver automatically turns on when connected to external power 3.2 W in rover mode with internal receive radio ²² Source consumption 3.2 W in rover mode with internal receive radio ²² Source consumption 3.2 W in rover mode with internal 0.5 W transmit radio Deserting times on internal battery ³³ So hours; varies with temperature Base station 5.5 hours; varies with temperature 450 MHz systems Approximately 4 hours; varies with temperature 900 MHz systems Approximately 4 hours; varies with temperature COMMUNICATIONS AND D-Key FORGE So hours; varies with temperature Lemo (Serial 1) Client or Access Point. Receive or transmit corrections. Wi-Fi b/g/n Subtooth® wireless technology Fully-integrated sealed 2.4 GHz Bluetooth module Channel spacing (450 MHz) 144 dBm (12 dB SINAD) Sensitivity (450 MHz) 144 dBm (12 dB SINAD) Sensitivity (450 MHz) 0.5 W.2.0 W, depending on the local required licencing. Frequency approvals (403-473 MHz) Worldwide, depending on the local required licencing. <						
DC external power input with over-voltage protection on Port 1 (Lemo) Receiver automatically turns on when connected to external power Power consumption 3.2 W in rover mode with internal receive radio ¹² 3.2 W in base mode with internal receive radio ¹² 2.2 W in base mode with internal 0.5 W transmit radio Operating times on internal batters ¹³ 5.5 hours; varies with temperature Base station 5.5 hours; varies with temperature 600 MHz systems Approximately 4 hours; varies with temperature 900 MHz systems Approximately 4 hours; varies with temperature VI-Fi Control Contrecont Contreconter Control Contrece Control Contrece Control Contr			Power source supply (Internal/External) is hot-swap capable in the event of			
Receiver automatically turns on when connected to external power Power consumption 3.2 W in rover mode with internal receive radio ¹² 5.2 W in base mode with internal 0.5 W transmit radio Operating times on internal battery ¹³ Rover 5.5 hours; varies with temperature Base station 5.5 hours; varies with temperature 450 MHz systems Approximately 4 hours; varies with temperature 900 MHz systems Approximately 4 hours; varies with temperature Wi-Fi Client or Access Point. Receive or transmit corrections. Wi-Fi b/g/n Bluetooth* wireless technology Fully-integrated sealed 2.4 GHz Bluetooth module Channel spacing (450 MHz) 12.5 kHz or 25 kHz spacing available Sensitivity (450 MHz) 12.5 kHz or 25 kHz spacing available Sensitivity (450 MHz) 0.5 W.2.0 W, depending on the local required licencing. Prequency approvals (403-473 MHz) Worlwide, depending on the local required licencing. Positioning rates 1Hz, 2Hz, 5 Hz, 10 Hz, and 20 Hz Data storage 9 GB internal data logging. Moving base and heading Data storage 0 GRR, rCMR 2.3, RTCM 3.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 input and output 24 NMEA outputs, GSOF, RT17, and						
Power consumption 3.2 W in rover mode with internal receive radio ¹² 5.2 W in base mode with internal 0.5 W transmit radio Operating times on internal battery ¹³ Rover 5.5 hours; varies with temperature Base station 5.5 hours; varies with temperature 450 MHz systems Approximately 4 hours; varies with temperature 900 MHz systems Approximately 4 hours; varies with temperature wore USB Nover USB Wi-Fi Client or Access Point. Receive or transmit corrections. Wi-Fi b/g/n Bluetooth® wireless technology Fully-integrated sealed 2.4 GHz Bluetooth module Integrated radios (optional) Fully-integrated, fully-sealed internal 403-473 MHz; Internal 900 MHz; Rx/Tx Channel spacing (450 MHz) 12.5 kHz or 25 kHz spacing available Sensitivity (450 MHz) 114 dBm (12 dB SINAD) 450 ML2 output power 05.W .2.0 W, depending on the local required licencing. Frequency approvals (403-473 MHz) Worldwide, depending on the local required licencing. Positioning rates 9 GB internal data logging. Moving base and heading Data storage 9 GB internal data logging. Moving base and heading Data format OMR+, OMRx, RTOM 2.1, RTOM 3.0, RTOM 3.0, RTOM 3.1, RTCM 3.2						
Operating times on internal battery!* 5.2 W in base mode with internal 0.5 W transmit radio Operating times on internal battery!* Rover 5.5 hours; varies with temperature Base station 5.5 hours; varies with temperature 450 MHz systems Approximately 4 hours; varies with temperature 900 MHz systems Approximately 4 hours; varies with temperature 900 MHz systems Approximately 4 hours; varies with temperature Wi-Fi COMMUNICATIONS AND DAT Cleint or Access Point. Receive or transmit corrections. Wi-Fi b/g/n Stuetooth® wireless technology Fully-integrated sealed 2.4 GHz Bluetooth module Integrated radios (optional) Fully-integrated sealed 2.4 GHz Bluetooth module Channel spacing (450 MHz) 12.5 kHz or 25 kHz spacing available Sensitivity (450 MHz) 14.4 dBm (12 dB SINAD) 450 MLz output power 0.5 W. 2.0 W, depending on the local required licencing. Trequency approvals (403-473 MHz) Worldwide, depending on the local required licencing. Trequency approvals (403-473 MHZ) Wi-Ricencing. Trequency approvals (403-473 MHZ) Wi-Ricencing. Trequency approvals (403-473 MHZ) Worldwide, depending on the local required licencing. Trequency approvals (403-473 MHZ) Wirldwide,		-				
Operating times on internal battery13 Rover 5.5 hours; varies with temperature Base station 5.5 hours; varies with temperature 450 MHz systems Approximately 4 hours; varies with temperature 900 MHz systems Approximately 4 hours; varies with temperature 000 MHz systems Approximately 4 hours; varies with temperature 000 MHz systems Approximately 4 hours; varies with temperature 000 MHz systems Approximately 4 hours; varies with temperature 000 MHz systems Approximately 4 hours; varies with temperature 000 MHz systems Approximately 4 hours; varies with temperature 000 MHz systems Approximately 4 hours; varies with temperature 000 MHz systems Approximately 4 hours; varies with temperature 000 MHz systems Approximately 4 hours; varies with temperature 000 MHz systems Approximately 4 hours; varies with temperature 000 MHz systems Approximately 4 hours; varies with temperature 000 MHz systems Approximately 4 hours; varies with temperature 010 Matrix Client or Access Point. Receive or transmit corrections. Wi-Fi b/g/n 101 Parterated radios (optional) Fully-integrated sealed 2.4 GHz Bluetooth module <		Power consumption	3.2 W in rover mode with internal receive radio ¹²			
Rover5.5 hours; varies with temperatureBase station5.5 hours; varies with temperature450 MHz systemsApproximately 4 hours; varies with temperature900 MHz systemsApproximately 4 hours; varies with temperature900 MHz systemsApproximately 4 hours; varies with temperaturecommon (Serial 1)7-pin Lemo 2-key, Power Input, USB. Optional USB to RS232 serial cable. Receiver supports RNDIS communications over USBWi-FiClient or Access Point. Receive or transmit corrections. Wi-Fi b/g/nBluetooth® wireless technologyFully-integrated sealed 2.4 GHz Bluetooth moduleIntegrated radios (optional)Fully-integrated, fully-sealed internal 403-473 MHz; Internal 900 MHz; Rx/TxChannel spacing (450 MHz)12.5 kHz or 25 kHz spacing availableSensitivity (450 MHz)-114 dBm (12 dB SINAD)450 MHz output power0.5 W, 2.0 W, depending on the local required licencing.Frequency approvals (403-473 MHz)Worldwide, depending on the local required licencing.Positioning rates1 Hz, 2 Hz, 5 Hz, 10 Hz, and 20 HzData format0 GB internal data logging. Moving base and headingData formatCMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 input and output 24 NMEA outputs, GSOF, RT17, and			5.2 W in base mode with internal 0.5 W transmit radio			
Base station5.5 hours; varies with temperature450 MHz systemsApproximately 4 hours; varies with temperature900 MHz systemsApproximately 4 hours; varies with temperaturecommon (Serial 1)7-pin Lemo 2-key, Power Input, USB. Optional USB to RS232 serial cable. Receiver supports RNDIS communications over USBWi-FiClient or Access Point. Receive or transmit corrections. Wi-Fi b/g/nBluetooth® wireless technologyFully-integrated sealed 2.4 GHz Bluetooth moduleIntegrated radios (optional)Fully-integrated, fully-sealed internal 403-473 MHz; Internal 900 MHz; Rx/TxChannel spacing (450 MHz)12.5 KHz or 25 kHz spacing availableSensitivity (450 MHz)0.5 W, 2.0 W, depending on the local required licencing.Yordwide, depending on the local required licencing.Positioning rates1Hz, 2 Hz, 5 Hz, 10 Hz, and 20 HzPositioning rates9 GB internal data logging. Moving base and headingData formatCMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 input and output 24 NMEA output 26 SOF, RT17, and	Operating times on internal battery ¹³					
Abore control of matching and province o		Rover	5.5 hours; varies with temperature			
900 MHz systemsApproximately 4 hours; varies with temperatureCOMMUNICATIONS AND DATA STORAGELemo (Serial 1)7-pin Lemo 2-key, Power Input, USB. Optional USB to RS232 serial cable. Receiver supports RNDIS communications over USBWi-FiClient or Access Point. Receive or transmit corrections. Wi-Fi b/g/nBluetooth® wireless technologyFully-integrated sealed 2.4 GHz Bluetooth moduleIntegrated radios (optional)Fully-integrated, fully-sealed internal 403-473 MHz; Internal 900 MHz; Rx/TxChannel spacing (450 MHz)12.5 kHz or 25 kHz spacing availableSensitivity (450 MHz)-114 dBm (12 dB SINAD)450 MHz output power0.5 W, 2.0 W, depending on the local required licencing.Frequency approvals (403-473 MHz)Worldwide, depending on the local required licencing.Positioning rates1 Hz, 2 Hz, 5 Hz, 10 Hz, and 20 HzData formatOMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 input and output 24 NMEA outputs, GSOF, RT17, and						
COMMUNICATIONS AND DATA STORAGE Lemo (Serial 1) 7-pin Lemo 2-key, Power Input, USB. Optional USB to RS232 serial cable. Receiver supports RNDIS communications over USB Wi-Fi Client or Access Point. Receive or transmit corrections. Wi-Fi b/g/n Bluetooth® wireless technology Fully-integrated sealed 2.4 GHz Bluetooth module Integrated radios (optional) Fully-integrated, fully-sealed internal 403-473 MHz; Internal 900 MHz; Rx/Tx Channel spacing (450 MHz) 12.5 kHz or 25 kHz spacing available Sensitivity (450 MHz) -114 dBm (12 dB SINAD) 450 MHz output power 0.5 W, 2.0 W, depending on the local required licencing. Frequency approvals (403-473 MHz) Worldwide, depending on the local required licencing. Positioning rates 1 Hz, 2 Hz, 5 Hz, 10 Hz, and 20 Hz Data storage 9 GB internal data logging. Moving base and heading Data format CMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 input and output 24 NMEA outputs, GSOF, RT17, and		450 MHz systems	Approximately 4 hours; varies with temperature			
Lemo (Serial 1)7-pin Lemo 2-key, Power Input, USB. Optional USB to RS232 serial cable. Receiver supports RNDIS communications over USBWi-FiClient or Access Point. Receive or transmit corrections. Wi-Fi b/g/nBluetooth® wireless technologyFully-integrated sealed 2.4 GHz Bluetooth moduleIntegrated radios (optional)Fully-integrated, fully-sealed internal 403-473 MHz; Internal 900 MHz; Rx/TxChannel spacing (450 MHz)12.5 kHz or 25 kHz spacing availableSensitivity (450 MHz)-114 dBm (12 dB SINAD)450 MHz output power0.5 W, 2.0 W, depending on the local required licencing.Frequency approvals (403-473 MHz)Worldwide, depending on the local required licencing.Positioning rates1 Hz, 2 Hz, 5 Hz, 10 Hz, and 20 HzData storage9 GB internal data logging. Moving base and heading CMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 input and output 24 NMEA outputs, GSOF, RT17, and			Approximately 4 hours; varies with temperature			
Clento (Serial 1)over USBWi-FiClient or Access Point. Receive or transmit corrections. Wi-Fi b/g/nBluetooth® wireless technologyFully-integrated sealed 2.4 GHz Bluetooth moduleIntegrated radios (optional)Fully-integrated, fully-sealed internal 403-473 MHz; Internal 900 MHz; Rx/TxChannel spacing (450 MHz)12.5 kHz or 25 kHz spacing availableSensitivity (450 MHz)-114 dBm (12 dB SINAD)450 MHz output power0.5 W, 2.0 W, depending on the local required licencing.Frequency approvals (403-473 MHz)Worldwide, depending on the local required licencing.Positioning rates1 Hz, 2 Hz, 5 Hz, 10 Hz, and 20 HzData storage9 GB internal data logging. Moving base and headingData formatCMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 input and output 24 NMEA outputs, GSOF, RT17, and	COMMUNICATIONS AND DAT					
Bluetooth® wireless technologyFully-integrated sealed 2.4 GHz Bluetooth moduleIntegrated radios (optional)Fully-integrated, fully-sealed internal 403-473 MHz; Internal 900 MHz; Rx/TxChannel spacing (450 MHz)12.5 kHz or 25 kHz spacing availableSensitivity (450 MHz)-114 dBm (12 dB SINAD)450 MHz output power0.5 W, 2.0 W, depending on the local required licencing.Frequency approvals (403-473 MHz)Worldwide, depending on the local required licencing.Positioning rates1 Hz, 2 Hz, 5 Hz, 10 Hz, and 20 HzData storage9 GB internal data logging. Moving base and heading CMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 input and output 24 NMEA outputs, GSOF, RT17, and	Lemo (Serial 1)					
Integrated radios (optional)Fully-integrated, fully-sealed internal 403-473 MHz; Internal 900 MHz; Rx/TxChannel spacing (450 MHz)12.5 kHz or 25 kHz spacing availableSensitivity (450 MHz)-114 dBm (12 dB SINAD)450 MHz output power0.5 W, 2.0 W, depending on the local required licencing.Frequency approvals (403-473 MHz)Worldwide, depending on the local required licencing.Positioning rates1 Hz, 2 Hz, 5 Hz, 10 Hz, and 20 HzData storage9 GB internal data logging. Moving base and headingChart formatCMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 input and output 24 NMEA outputs, GSOF, RT17, and	Wi-Fi					
Channel spacing (450 MHz)12.5 kHz or 25 kHz spacing availableSensitivity (450 MHz)-114 dBm (12 dB SINAD)450 MHz output power0.5 W, 2.0 W, depending on the local required licencing.Frequency approvals (403-473 MHz)Worldwide, depending on the local required licencing.Positioning rates1 Hz, 2 Hz, 5 Hz, 10 Hz, and 20 HzData storage9 GB internal data logging. Moving base and headingCMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 input and output 24 NMEA outputs, GSOF, RT17, and	Bluetooth® wireless technology	Fully-integrated sealed 2.4 GHz Bluetooth module				
Sensitivity (450 MHz)-114 dBm (12 dB SINAD)450 MHz output power0.5 W, 2.0 W, depending on the local required licencing.450 MHz output power0.5 W, 2.0 W, depending on the local required licencing.Frequency approvals (403-473 MHz)Worldwide, depending on the local required licencing.Positioning rates1 Hz, 2 Hz, 5 Hz, 10 Hz, and 20 HzData storage9 GB internal data logging. Moving base and headingCMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 input and output 24 NMEA outputs, GSOF, RT17, and	ntegrated radios (optional)	Fully-integrated, fully-sealed internal 403-473 MHz; Internal 900 MHz; Rx/Tx				
450 MHz output power0.5 W, 2.0 W, depending on the local required licencing.Frequency approvals (403-473 MHz)Worldwide, depending on the local required licencing.Positioning rates1 Hz, 2 Hz, 5 Hz, 10 Hz, and 20 HzData storage9 GB internal data logging. Moving base and headingCMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 input and output 24 NMEA outputs, GSOF, RT17, and	Channel spacing (450 MHz)	12.5 kHz or 25 kHz spacing available				
Frequency approvals (403-473 MHz)Worldwide, depending on the local required licencing.Positioning rates1 Hz, 2 Hz, 5 Hz, 10 Hz, and 20 HzData storage9 GB internal data logging. Moving base and headingData formatCMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 input and output 24 NMEA outputs, GSOF, RT17, and	Sensitivity (450 MHz)	-114 dBm (12 dB SINAD)				
Positioning rates 1 Hz, 2 Hz, 5 Hz, 10 Hz, and 20 Hz Data storage 9 GB internal data logging. Moving base and heading Data format CMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 input and output 24 NMEA outputs, GSOF, RT17, and	450 MHz output power	0.5 W, 2.0 W, depending on the local required licencing.				
Data storage 9 GB internal data logging. Moving base and heading Data format CMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 input and output 24 NMEA outputs, GSOF, RT17, and	Frequency approvals (403-473 MHz)					
Data format CMR+, CMRx, RTCM 2.1, RTCM 2.3, RTCM 3.0, RTCM 3.1, RTCM 3.2 input and output 24 NMEA outputs, GSOF, RT17, and	Positioning rates	1 Hz, 2 Hz, 5 Hz, 10 Hz, and 20 Hz				
	Data storage	9 GB internal data logging. Moving base and heading				
	Data format					



Trimble R780 **GNSS** System



CERTIFICATIONS			
	FCC Part 15 Subpart B (Class B Device), Part 15.247, Part 90		
	Canadian ICES-003 (Class B), RSS-GEN, RS-102, RSS-247		
	IEC62368-1 2nd Edition		
	CISPR 32, EN 55032, EN 55035		
	RCM mark, AS/CISPR 32, AS/NZS 4768		
	Japan MIC		
	CE mark, Radio Equipment Directive (RED 2014/53/EU)		
	RoHS compliance		
	WEEE compliance		
TRIMBLE PROTECTED PROTECTION PLANS			

Add a Trimble Protected protection plan for worry-free ownership over and above the standard Trimble product warranty Added enhancements include coverage for wear & tear, environmental damage, and more. Accidental damage is covered with Premium plans, available only at point-of-sale in selected regions. For details, visit trimbleprotected.com or contact a local Trimble distributor

- Challenging GNSS environments are locations where the receiver has sufficient satellite availability to achieve 1 Challenging GMSS environments are locations where the receiver has sufficient satellife availability to achieve minimum accuracy requirements, but where the signal may be partly obstructed by and/or reflected off of trees, buildings, and other objects. Actual results may vary based on user's geographic location and atmospheric activity, scintillation levels, GMSS constellation health and availability, and level of multipath and signal occlusion. The current capability in the receivers is based on publicly available information. As such, Timble cannot guarantee that these receivers will be fully compatible with a future generation of Galieo satellites or signals. Precision and reliability may be subject to anomalies due to multipath, obstructions, satellite geometry, and atmospheric conditions. The specifications stated recommend the use of stable mounts in an open sky view, EMI and multipath clean environment, optimal GNSS constellation configurations, along with the use of survey practices that are generative accented its proferement to bispect environs (the pareliceta) explicition generation and mount proferement bispect environs that develor survey for the parelicity and participation and part of survey practices that are generative accented in the bispect environs to an open sky view. EMI and multipath clean environment, optimal GNSS constellation configurations, along with the use of survey practices that are generative accented in the bispect environs to an open sky view.
- 2
- 3
- multipath clean environment, optimal GNSS constellation configurations, along with the use of survey practices that are generally accepted for performing the highest-order surveys for the applicable application including occupation times appropriate for baseline length. Baselines longer than 30 km require precise ephemeris and occupations up to 24 hours may be required to achieve the high precision static specification. Network RTK PPM values are referenced to the closest physical base station. May be affected by atmospheric conditions, signal multipath, obstructions and satellite geometry. Initialisation reliability is continuously monitored to ensure highest quality. TIP references the overall positioning error estimate at the tip of the surveying pole throughout the tilt compensation range. RTK refers to the estimated horizontal precision of the underlying GNSS position, which is dependent on factors that affect GNSS solution quality. The 8 mm constant error component accounts for residual misalignment between the vertical axes of the receiver and the built-in Inertial Measurement Unit (IMU) after factory calibrated and free from physical defects. The tilt-dependent error component is a function of the quality of the computed tilt azimuth, which is assumed here to be aligned using optimal GNSS conditions. For best IMU tilt compensated results, perform a pole bias adjustment. 6 a pole bias adjustment.
- RMS performance based on repeatable in field measurements. Achievable accuracy and initialisation time may vary based on type and capability of receiver and antenna, user's geographic location and atmospheric activity, scintillation levels, GNSS constellation health and availability and level of multipath including obstructions such as large trees and buildings. Accuracies are dependent on GNSS satellite availability. xFill positioning without an xFill Premium subscription ends after 5 minutes of radio downtime. xFill Premium will continue beyond 5 minutes providing the solution has converged, with typical precisions not exceeding 3 cm horizontal, 7 cm vertical. xFill is not available in all regions, check with your local sales representative for more information. RTK refers to the last reported precision before the correction source was lost and xFill started. Deponder on SBAS exceeding and the solution of the solution before the correction source was lost and xFill started. RMS performance based on repeatable in field measurements. Achievable accuracy and initialisation time may

- 9 R1R refers to the last reported precision before the correction source was lost and x+iii started.
 10 Depends on SBAS system performance.
 11 Receiver will operate normally to -40 °C, internal batteries are rated from -20 °C to +60 °C (ambient +50 °C).
 12 Tracking GPS, GLONASS and SBAS satellites.
 13 Varies with themperature and wireless data rate. When using a receiver and internal radio in the transmit mode, it is recommended that an external 6 Ah or higher battery is used.

Specifications subject to change without notice



NORTH AMERICA Trimble Inc. 10368 Westmoor Dr Westminster CO 80021 USA

EUROPE Trimble Germany GmbH Am Prime Parc 11 65479 Raunheim GERMANY

ASIA-PACIFIC

Trimble Navigation Singapore PTE Limited 3 HarbourFront Place #13-02 HarbourFront Tower Two Singapore 099254 SINGAPORE

Contact your local Trimble Authorised Distribution Partner for more information



© 2022–2023, Trimble Inc. All rights reserved. Trimble, the Globe & Triangle logo, CenterPoint, ProPoint Trimble RTX and xFill are trademarks of Trimble Inc. e 2022 - 2023, indicate and in other countries reserved, initiale, the outped to fair the outped for any the outped for any set of the outped for an