

Total Station V-200 Series Specifications

Model		V-227 N	V-227	
Telescope	Magnification	30X	30X	
	Resolving power	3"	3"	
	Field of view	1°30' (2.6% - 26m at 1km)		
	Minimum focus distance	1.0m	1.0m	
Angle measurement	Measuring method	Absolute rotary encoder		
	Minimum angle display	5" (10cc)/10" (20cc) (Selectable)		
	Standard deviation (Angle)	7" (2 mgon)	7" (2 mgon)	
	Vertical angel compensation	Single axis		
Distance measurement	Accuracy:	Reflectorless	±(5+2ppm x D)mm	
		Reflective sheet/foil	-	
		Prism	±(3+2ppm x D)mm	
	Distance measurement:	Reflectorless	1.5 - 90m	-
		Reflective sheet/foil	-	-
		Mini Prism	1.5 - 800m	1.5 - 600m
		Prism: 1P	1.5 - 1400m	1.5 - 1000m
		3P	1.5 - 1900m	1.5 - 1300m
		9P	-	-
	Measurement time	Normal	Prism 2.0sec (1mm)	Prism 2.0sec (1mm)
Fine		-	-	
Coarse		-	-	
Tracking		Prism 0.4sec (1cm)	Prism 0.4sec (1cm)	
Miscellaneous	Internal memory	Yes		
	Memory capacity- Collect	6000		
	Plate Vial sensitivity	40"/1 div.	40"/1 div.	
	Circular level sensitivity	8/2mm	8/2mm	
	Laser Plummet:	type	-	
		accuracy	-	
	Optical Plummet:	Magnification	-	
		Field of view	-	
		Focusing range	-	
		Interface	RS232C	
	Water resistance	IP44 (instrument only)		
	Dimension (mm)	172(W) x 343(H) x 177(L)mm		
	Weight	5.4kg (incl. Battery)		
	External color		Grey / Red / Black	Grey / Red / Black
Battery:				
- Voltage		DC 6V	DC 6V	
- Ampere		4300 mAh	4300 mAh	
	- Type	Ni-Mh	Ni-Mh	

Applications which Power Topo Express supports in your daily work:

- Surveying
- Stake Out
- Point to line
- Graphical View
- Free Station
- Remote Height
- 2D Surface
- Remote Distance

The major benefits of the Power Topo Express are its flexibility and ease of use which lets inexperienced operators perform.

Ahead of Vision

Light is the element of seeing and it brings color into the world. Pentax has excelled in this medium for over 85 years. Since our beginning our engineers have brought forth innovative precision optical equipment year after year. Pentax Optics – photo camera's, medical endoscopes as well as industrial and measuring optics – are always ahead of their time regarding quality, precision and innovation.

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CAUTION
 LASER RADIATION - DO NOT
 STARE INTO BEAM
 620-690 nm/0.95mW max.
 CLASS II LASER PRODUCT
 Laserclass II, conform FDA 21 CFR
 Ch. 1 § 1040

JSIMA
 Japan Surveying Instruments Manufacturers' Association
 Member symbol of the Japan Surveying
 Instruments Manufacturers' Association
 representing the high quality surveying
 products.



THE EVOLUTION SERIES V200

100% Small 100% Big
Performance in a cost-effective way
 V-227N | V-227

- Easy to use
- Reflectorless
- Affordable
- Robust design
- Made for growth markets



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The V-200 is a electronic theodolite, a coaxial distance meter, and a full-featured total station with reflectorless measuring capacity which provides an exceptional performant and cost-effective solution to a wide range of general and concrete construction applications and is designed to be accessible to users of all skill levels.

V-200 Key features

Advantages to the user/operator

Easy to use – Operator Friendly

Internal memory with a large storage capacity of 6000 points

Absolute rotary encoder keeps the absolute angle position even after shutdown of the V-200

Pentax Precision Optics with 30 x magnification

Large LCD Display

Navigation Key



Standard Camcorder Battery

Upload and datatransfer via onboard data connection



Quick selection of the different measuring modes

The V-200 measures distances with or without a prism and that with equal ease. Quickly select the desired laser – mode with only one keystroke and the built-in distance meter measures inaccessible points up to 90 meters away without a prism and range up to 1900 meters using a single prism unit while maintaining a standard deviation of $\pm(3+2\text{ppm} \times D)$.

Simple Intuitive User Interface for all skill levels

On-board Software Power Topo Express

All inspection operations are directly controlled via five keys and a standard user interface with a pull-down menu that guides you through setup and survey routine execution.



Large LCD Display

The V-200 features a large LCD display which is easy to read.



Effective data management and Exchange

Information between the V-200 and a computer can be exchanged via a standard RS-232 cable.



Standard Camcorder Battery

Offers up to a whole working day and best price /performance ratio. Eliminates the costly customized batteries.

Compact for Optimal portability

The V-200 is compact and lightweight and the standard configuration with everything what you need, excluding a tripod and prism, for a day's work fits into a easy-to-carry case.