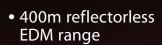
PENTAX R-400V Series

EFFICIENT ACCURACY AT YOUR FINGERS!



- Easy transfer to a PĆ via USB, SD connection
- Dual axis compensator 3" and 5" models
- Triple axis compensator 2" model
- Adjustable laser plummet

INCREASED PRODUCTIVITY FASTER TURNAROUND







Total Station R-400V Series Specifications

Model		R-422VN	R-423VN	R-425VN	R-435VN
Telescope	Magnification			30 x	
	Effective aperture	45mm (EDM45mm)			
	Resolving power	3.0"			
	Field of view	2.6 % (1° 30′)			
	Minimum focus		1.0 m		
	Focus		Manual		
istance measurement	Laser Class	Visible laser: Class III a (3R) (Reflectorless) / Class II (2) (Prism, sheet)			eet)
leasurement range	Reflectorless (*1)	1.5 ~ 400 m			
(Good conditions) (*3)	Reflector sheet (*2)		1.5 ~ 600 m (800 m)		
	Mini Prism		1.5 ~ 1,600 m (2,000 m)		
	1 P		1.5 ~ 5,500 m (7,000 m)		
	3 P		1.5 ~ 7,000 m (9,000 m)		
Accuracy	Prism / Reflector sheet	1.5 ~ 10 m: ± (3 + 2 ppm x D) mm / 10 m ~: ± (2 + 2 ppm x D) mm, Quick: ± (3+2ppm×D) mm (*5)			
	Reflectorless	1.5 ~ 300 m: ± (5 + 2 ppm x D) mm / 300 m ~: ± (7 + 10 ppm x D) mm			
	Minimum count	0.1 mm (Fine mode) / 1 mm (Normal mode) / 10mm (Track mode)			
Meassuring time (*4)	Repeat meas. Normal (1 mm)		Prism / Reflector sheet 2.0 sec - Reflectorless 2.0 sec		
	Quick (1 mm)		Prism / Reflector sheet 1.2 sec (*5)		
	Track (10 mm)		Prism / Reflector sheet 0.4 sec - Reflectorless 0.4 sec		
	Initial meas. Normal (1 mm)		Prism / Reflector sheet 2.5 sec - Reflectorless 2.4 sec		
	Quick (1 mm)		Prism / Reflector sheet 1.7 sec (*5)		
	Track (10 mm)		Prism / Reflector sheet 2.5 sec - Reflectorless 2.5 sec		
Angle measurement	Measurement method		Absolute rotary encoder		
	Direction method	Vertical / Horiz	ontal angle: 2 sides Vertical / Horizontal angle: 1 side		ntal angle: 1 side
	Minimum count		1" / 5" selectable		
	Accuracy (ISO 17123-3)	2"	3"		5"
ompensator		3 Axis		2 Axis	
arget screw		1 speed			
Sensitivity of vials	Plate level		30"	/ 2 mm	
	Circular level		8' / 2 mm		
aser Plummet		Visible laser: ± 0.5mm (instrument height: 1.5m) (Optical Plummet is optional)			
ase		Detachable Shifting			
ust & water resistance		IP56 (instrument only)			
mbient temperature			-20°C ~ +50°C / -4°F ~ 122°F (working range)		
ripod thread			5/8" x 11		35 mm P2
Dimensions / Weight	Dimensions		180 (W) x 342 (H) x 177 (L) mm		
	Weight (incl. battery)	5.7 kg		5.5 kg	
	Carrying case		250 (W) x 365 (H) x 425 (L) mm		Ĭ
Battery pack	Power source	Ni-MH 4300 mAh (rechargeable) DC 6.0 V			
	Operation time	Approx. 7.0 hrs (ETH + EDM) / 15hrs (ETH) with approx. 2.2 hrs of charging time			
	Weight	380 g			
attery charger	Input Voltage		AC 100 ~ 240 V		
and AC adapter	Output Voltage		DC 7.5 V		
	Weight			280 g	
Data Process	Data recording method			Memory (*7)	
	Coordinates data (*6)			5,000	
	Special function			rTopoLite	
	I/F	RS-232C, SD CARD, USB			
Display / keyboard	Display type	Graphic LCD / 20 characters x 8 lines / 240 x 96 pixels			
	Quantity			l optional)	p
	Keys			/5 function / 5 special)	
	Display back light		<u> </u>	ttings: 10 steps	
aser Pointer				Yes	
Date clock				Yes	

- *1 The measurement range and accuracy of reflectorless, and time required to measure may vary by the shape, size of surface area and reflection rate of the target and its environment. The measurement range of reflectorless is determined by the white side of the Kodak Gray Card. (KODAK is a trademark of Eastman Kodak Company)

 *2 Reflector sheet: PENTAX genuine Reflector sheet

 *3 The measurement range may vary by conditions of the environment.

Normal conditions: 20km visibility with slight shimmer

- Good conditions: 40km visibility, overcast, no heat, no shimmer and moderate wind.

 *4 EDM measuring time is determined in good conditions. It may takes longer than usual to measure the distance exceeding 4000m in prism mode and 300m in reflectorless mode. Also the measurement time in reflectorless mode is influenced by the share, size and surface area and reflection rate of the target and its environment.
- *5 Quick mode, which functions with prism and reflector sheet, is effective only under normal mode(1mm) and up to 500m.

*6 Number of points to be recorded may vary by usage.

Maximum number of point to be recorded per job site: 3000 points Maximum number of job file to be recorded: 50 job files

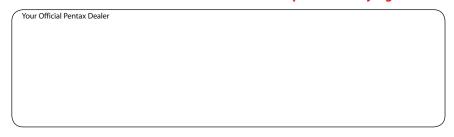
- Maximum data points to be sent from PC to the instrument: 3000 points
- *7 Memory Capacity:>128MB

TI Asahi Co., Ltd.

International Sales Department

4-3-4 Ueno Iwatsuki-Ku, Saitama-Shi Saitama, 339-0073 Japan Tel.: +81-48-793-0118 Fax. +81-48-793-0128 E-mail: International@tiasahi.com

www.pentaxsurveying.com/en/





ISO ISO 9001:2008 You should be able to use any SD card in your camera. While Pentax does not guarantee compatibility with any particular manufacturer or model, we have seen consistent compatibility with SD cards from Panasonic (1GB), SanDisk (1GB), and Toshiba (1GB)







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