

Department of Public Works and Highways BUREAU OF DESIGN SURVEYS AND INVESTIGATION DIVISION Standard Technical Specifications for ENGINEERING SURVEY EQUIPMENT

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Issue Date :	01/06/23				
Doc. Code	DPWH-BOD-SID-QMSF-13.f				
Revision No.	7				
Page No.	1 of 2				

Name of Equipment: GLOBAL NAVIGATION SATELLITE	SYSTEM (GNSS) EQUIPMENT		
Description:			
Data receiver which converts signals from visible satellites the	n use this information to determine their waitem water water		
Main Equipment Components	Specification		
Receiver (Base/Rover)			
Multi-frequency (Capable of receiving multitude of signals	Statural 0:54		
from any GNSS system)			
Measurement Capability	Single Base RTK, Network RTK and PPK Is provide the provident of the formation		
Integrated Transmit and Receive Data Link	The second state of the se		
Base and Rover interchangeable (same brand and model)			
Satellite Tracking	GPS, GLONASS, BEIDOU, GALLEO, OZSS, SBAS		
No. of Channels	1440 channels (min.)		
High Accuracy Static (RMS)	(Horizontal: 3 mm ± 0.1 ppm $_{\rm m}$ $_{\rm m}$ $_{\rm m}$ $_{\rm m}$ $_{\rm m}$ $_{\rm m}$		
	$\{vertucal, 0.0 \text{ film} \pm 0.4 \text{ ppin} \text{ stanatum}, \frac{1}{2}\}$		
Static and Fast Static (RMS)	$[Horizontal: 3 mm \pm 0.5 ppm 0]$		
	Vertical: 5 mm ± 0.5 ppm Unauthorized reproduction of this document		
Real Time Kinematic (RTK)	Horizontal: 8 mm ± 1.0 ppm		
	Vertical: 15 mm ± 1.0 ppm		
Equipment Time to Fix	15secs (max.)		
Battery life	6 hours (min., single/multiple, hot-swappable)		
Dust/Water Protection	IP67 (min,)		
Communication	Bluetooth, WI-FI, USB, Cellular		
Field Controller			
Same brand as the receiver or with certificate of compatibility	Y		
from the manufacturer			
Operating System Screen size	Windows/Android OS 7" (min), colored		
Internal Storage	32 GB (min)		
External Storage	32 GB (min)		
RAM	4 GB (min)		
Dust/Water Protection	1P67 (min.)		
Camera	8MP (min.)		
Battery Life	8hrs (min., single/multiple)		
Applications Installed	Stake out, volume calculation, and road module applications		
(License/Certification attached)			
External Radio			
Same brand as the receiver or with Certificate of compatibilit	y from the manufacturer of main equipment		
Output Power	35W		
Frequency Range (UHF)	300Mhz 3Ghz		
With 1 set External Battery			
Post Processing Software (License/Certification attached)			
Data Processing Laptop	Display: 15.6" (min.)		
	OS: Windows 11 or latest edition		
	Processor: 11th Gen. Intel Core 17 or AMD Ryzen equivalent		
	GPU: RTX3060 or better		
	RAM: 16GB		
	Storage: 1TB SSD		
	Warranty: 1 year		

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Department of Public Works and Highways BUREAU or DESIGN Issue Date: 1.7.1.0.0.7.1. Dec. Code DPWH-BOD-SID-WISF-13.7 Standard Technical Specifications for ENGINEERING SURVEY EQUIPMENT Doc. Code DPWH-BOD-SID-WISF-13.7 Accessories 2.012 2.012 Dec. Dave Proid (same brand as the receiver) 1.015 1.015 Accessories Caliform the Installed batteries, Manufacturer's battery 1.015 Accessories Caliform the Installed batteries Caliform the Author (2005) Accessories Caliform to Controller, Manufacturer's Charger (1000) Caliform to Controller, Manufacturer's Charger (2005) Vith at dast five (3) vs. experience in supplying survey equipment							
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