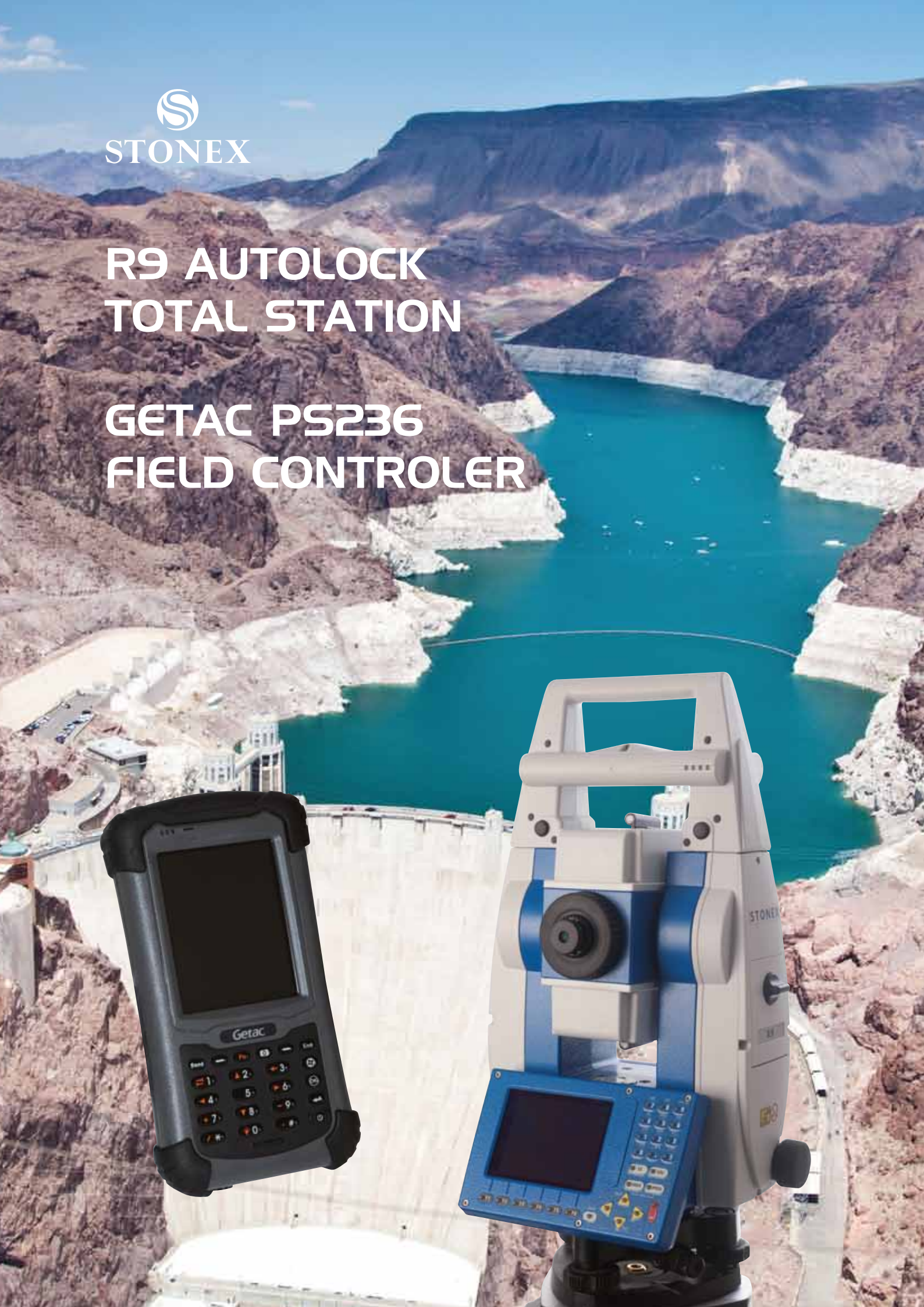




R9 AUTOLOCK TOTAL STATION

GETAC PS236 FIELD CONTROLLER



R9 AUTOLOCK TOTAL STATION

Technical Data



Technical features		R9 ROBOTIC TOTAL STATION	
Angle measurement		2" Type	3" Type
Accuracy	Hz:	2" (0.6 mgon)	3" (1 mgon)
(standard deviation, ISO 17123-3)	Display resolution:	0.1" (0.1 mgon)	0.1" (0.1 mgon)
Method	absolute, continuous, diametrical	0.1" (0.1 mgon)	0.1" (0.1 mgon)
Compensator	Working range:	4' (0.07 gon)	4' (0.07 gon)
	Setting accuracy:	0.5" (0.2 mgon)	1.0" (0.3 mgon)
	Method:	centralized dual axis compensator	
Distance measurement			
Range	Round prism:	3000 m	
(average atmospheric conditions)	360° reflector:	1500 m	
	Mini prism: 1200 m		
	Reflective tape (60 x 60 mm):	250 m	
	Shortest measurable distance:	1.5 m	
Accuracy / Measurement time	Standard mode:	1 mm + 1.5 ppm / typ. 2.4sec	
	Fast mode:	3 mm + 1.5 ppm / typ. 0.8 s	
	Tracking mode:	3 mm + 1.5 ppm / typ. 0.15 s	
	Display resolution:	0.1 mm	
Method	Phase measurement (coaxial, visible red laser)		
DR reflectorless distance measurement			
Range	DR 400 - 400m model	400 m / 200 m (Kodak Grey Card: 90% reflective / 18% reflective)	
	DR1000 - 1000m model	1000 m / 500 m (Kodak Grey Card: 90% reflective / 18% reflective)	
	Shortest measurable distance:	1.5 m	
	Long Range to round prism:	1000 m - 7500 m	
Accuracy / Measurement time	Reflectorless < 500 m:	2 mm + 2 ppm / typ. 3-6 s, max. 12 s	
	Reflectorless > 500 m:	4 mm + 2 ppm / typ. 3-6 s, max. 12 s	
(standard deviation, ISO 17123-4)	Long Range:	5 mm + 2 ppm / typ. 2.5 s, max. 12 s	
Laser dot size	At 20m:	approx. 7 mm x 14 mm	
	At 100 m:	approx. 12 mm x 40 mm	
	At 200 m:	approx. 25 mm x 80 mm	
Method	DR400 / DR1000	Phase measurement (coaxial, visible red laser)	
Motorized			
Maximum speed	Rotating speed:	45° / s	
iLock (Target Recognition)			
Range iLock mode	Round prism:	1000 m / 800 m	
	360° reflector:	600 m / 500 m	
	Mini prism:	500 m / 400 m	
	Reflective tape (60 x 60 mm):	55 m	
	Shortest measurable distance:	1.5 m / 5 m	
Accuracy / Measurement time	Positioning accuracy:	< 2 mm	
	Measurement time:	3 - 4 s	
Maximum speed (LOCK mode)	Tangential (standard mode):	5 m/s at 20 m, 25 m/s at 100 m	
	Radial (tracking mode):	4 m/s	
Method	Digital image processing (laser beam)		
SureBeam			
Range (average atmospheric conditions)	Working range:	5 m - 150 m	
	Accuracy	Positioning accuracy:	5 cm at 100m
Telescope			
Magnification	30X		
Free objective aperture	40 mm		
Field of view	1°30' (1.66 gon) / 2.7 m at 100m		
Focusing range	1.7 m to infinity		
Keyboard and display			
Display	1/4 VGA (320*240 pixels), graphic LCD, illumination, touch screen		
Keyboard	28 keys (6 function keys, 12 alphanumeric keys)		
Angle display	360° ' ', 360° decimal, 400 gon, 6400 mil, V%		
Distance display	meter, int. Ft, int. ft/inch, US ft, US ft/inch		
Position	Face I standard		
Data Storage			
Memory card	CF cards (256 MB)		
Interfaces	RS232, Bluetooth		
Circular level			
Sensitivity	6' / 2 mm		
Laser plummet			
Centering accuracy	1.5 mm at 1.5 m		
Laser dot diameter	2.5 mm at 1.5 m		
Endless drives			
Number of drives	1 horizontal / 1 vertical		
Battery			
Type	Lithium-Ion		
Voltage	7.4 V		
Capacity	3.8 Ah		
Operating time	Typically 5-8 hours		
Weight			
Total station	5.5 Kg		
Battery	0.2 Kg		
Tribrach	0.8 Kg		
Environmental specifications			
Working temperature range	-20°C to +50°C		
Storage temperature range	-40°C to +70°C		
Dust / water (IEC 60529)	IP54		
Humidity	95%, non-condensing		

