

Range Option	Focus Premium 350	Focus Premium 150	Focus Premium 70	Focus Core
Unambiguity Interval	614 m for up to 0.5 MPts/sec 307 m at 1 MPts/sec 153 m at 2 MPts/sec	614 m for up to 0.5 MPts/sec 307 m at 1 MPts/sec 153 m at 2 MPts/sec	614 m for up to 0.5 MPts/sec 307 m at 1 MPts/sec 153 m at 2 MPts/sec	-
Range				
White, 90% Reflectivity	0.5 – 350 m	0.5 – 150 m	0.5 – 70 m	0.5 – 70 m
Dark-grey, 10% Reflectivity	0.5 – 150 m	0.5 – 150 m	0.5 – 70 m	0.5 – 70 m
Black, 2% Reflectivity	0.5 – 50 m	0.5 – 50 m	0.5 – 50 m	0.5 – 70 m
Range Noise ⁽¹⁾⁽²⁾				
White, 90% Reflectivity	0.1 mm @ 10 m, 0.2 mm @ 25 m			0.4 mm @ 10 m, 0.5 mm @ 25 m
Dark-grey, 10% Reflectivity	0.3 mm @ 10 m, 0.4 mm @ 25 m			1.0 mm @ 10 m, 1.5 mm @ 25 m
Black, 2% Reflectivity	0.7 mm @ 10 m, 1.2 mm @ 25 m			3.0 mm @ 10 m, 5.0 mm @ 25 m
Max Speed	Up to 2 MPts/sec			Up to 0.5 MPts/sec
3D Accuracy ⁽³⁾	2 mm @ 10 m, 3.5 mm @ 25 m			3 mm @ 10m, 4 mm @ 25m
Ranging Error ⁽⁴⁾	±1 mm			±2 mm
Angular Accuracy ⁽⁵⁾	19 arcsec			
LaserHDR	Yes			
Temperature Range ⁽⁶⁾	Operating: +5 ° to +40 °C, Extended Operating: -20 ° to +55 °C, Storage: -10 ° to +60 °C			
Color Unit				
Color Resolution	Up to 266 MPx color			Up to 165 MPx color
Raw Color Resolution	867 MPx			527 MPx
HDR Camera	13 MPx - 2x, 3x, 5x brackets			8 MPx - 2x, 3x, 5x brackets
Parallax	Minimized due to co-axial design			
Deflection Unit				
Field of View	300° vertical(8) / 360° horizontal			
Step Size	0.009° (40,960 Pts on 360°) vertical / 0.009° (40,960 Pts on 360°) horizontal			
Max. Scan Speed	97 Hz (vertical)			
Laser (Optical Transmitter)				
Laser Class	Laser Class 1			
Wavelength	1553.5 nm			
Beam Divergence	0.3 mrad (1/e)			
Beam Diameter at Exit	2.12 mm (1/e)			
Data Handling and Control				
Data Storage	SATA 3.0 SSD 128 GB and SDXC™ V30 64 GB SD Card; SD3.0, UHS-I / SDXC™ / SDHC™, max. 512 GB			
Scanner Control	Via touch screen display and WLAN connection, Control by FARO Stream App (iOS & Android) or mobile devices with HTML5			Via touch screen display & WLAN connection, Control by FARO Stream App (iOS & Android) or mobile devices with HTML5
Interface Connection				
WLAN	IEEE 802.11 ac/a/b/g/n 2x2 MIMO, as access point or client in existing networks (2.4 and 5 GHz)			
USB	USB 3 port			
Additional Features				
Dual Axis Compensator	Performs a leveling of each scan with an accuracy of 19 arcsec valid within ±2°			
Height Sensor	Via an electronic barometer, the height relative to a fixed point can be detected and added to a scan			
Compass ⁽⁹⁾	The electronic compass gives the scan an orientation GNSS Integrated GPS & GLONASS			
GNSS	Integrated GPS & GLONASS			
On-Site Compensation	Creates current quality report and improves compensation automatically			-
Accessory Bay	The accessory bay connects versatile accessories to the scanner			
Inverse Mounting	Yes			
White, 90% Reflectivity	Stream App real-time scan streaming, registration, overview map and Sphere cloud upload			Stream App (optional)
Dark-grey, 10% Reflectivity	Available as option, only at point of sale			-
Black, 2% Reflectivity	Scans are cryptographically hashed and signed by the scanner			
Dark-grey, 10% Reflectivity	Defined areas recaptured in higher resolution at a greater distance			
Black, 2% Reflectivity	Select individual photographs with unwanted objects and retake them			
General Specifications				
Power Supply	19 V (external supply), 14.4 V (internal battery)			
Typical Power Consumption	19 W idle, 32 W scanning, 72 W charging			
Typical Battery Operation Time	About 4 hours			
Typical Scan Time ⁽⁷⁾	About 1 min			
Ingress Protection (IP) Rating Class	54			
Humidity	Non-condensing			
Weight	4.4 kg (including battery)			
Size/Dimensions	230 x 183 x 103mm			
Calibration	Recommended annually			
Manufacturer Warranty	2 years			

⁽¹⁾ Ranging noise is defined as the variation of distance samples from repeated measurements of a single point at 122k Pts/sec

⁽²⁾ Some surfaces can lead to additional noise

⁽³⁾ For distances larger 25 m add 0.1 mm/m of uncertainty

⁽⁴⁾ Ranging error is defined as a systematic measurement error at around 10 m and 25 m

⁽⁵⁾ It is recommended to perform on-site compensation in the event the unit is exposed to exceptional temperature or mechanical stress

⁽⁶⁾ Low temperature operation: scanner has to be powered on while internal temperature is at or above 15° C. High temperature operation: additional accessory Thermal Cover required

⁽⁷⁾ Accelerated Profile with PanoCam

⁽⁸⁾ 2x150°, homogeneous point spacing is not guaranteed

⁽⁹⁾ Ferromagnetic objects can disturb the earth magnetic field and lead to inaccurate measurements

All accuracy specifications are standard deviations, after warm-up and within operating temperature range; unless otherwise noted. Subject to change without prior notice.