

		Quarryman Pro	Quarryman Pro LR (long range)
<b>Operating temperature range****</b>		-20 °C to +45 °C	-20 °C to +45 °C
<b>Weight</b>	Including tribrach	8 Kg	8 Kg
	Including tribrach and battery pack	8.6 kg	8.6 kg
	Including transit case and accessories	16.5 kg	16.5 kg

\* Viewing the laser output with certain optical instruments designed for use at a distance (for example, telescopes and binoculars) may pose an eye hazard.

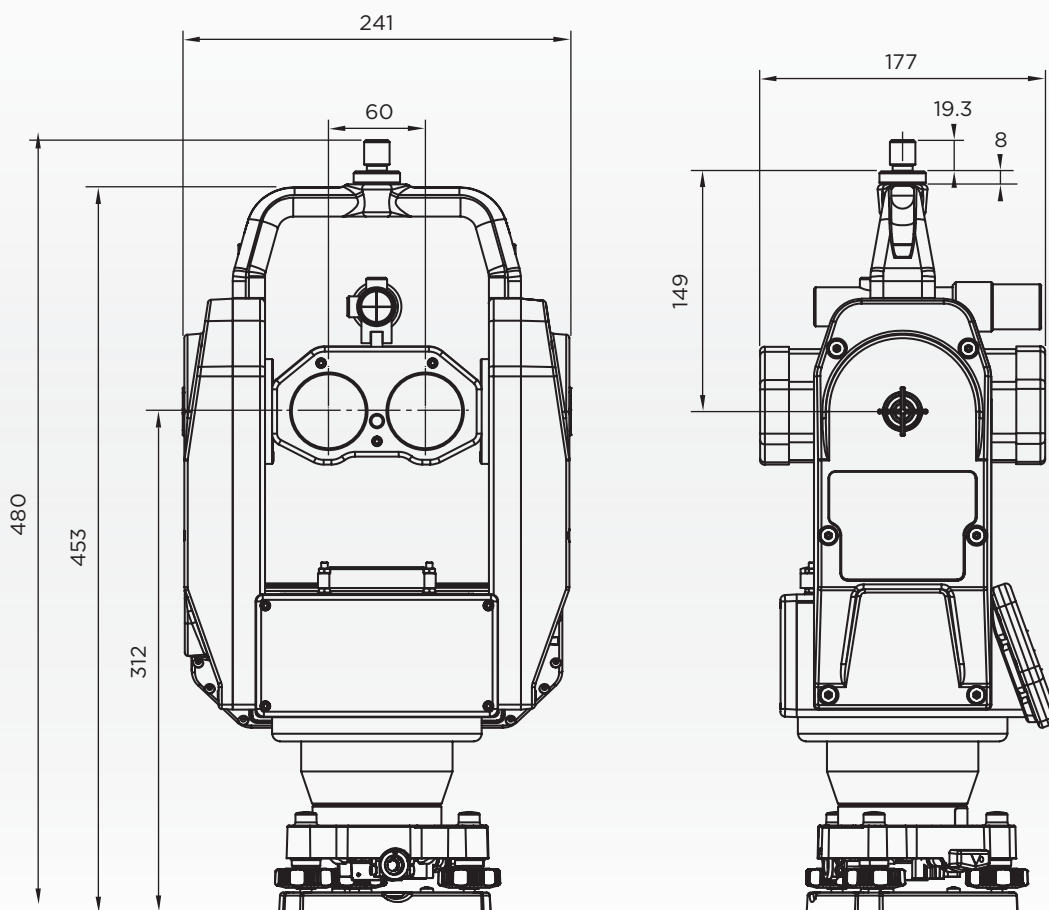
\*\* Visible and invisible laser radiation. Avoid direct eye exposure.

\*\*\* Max measuring ranges are recorded against Kodak white card (90% reflectivity).

\*\*\*\* Visible laser module operational -10°C to +60 °C

For further information and the best possible application and performance support please contact Carlson at [lasermeasurement@carlsonsw.com](mailto:lasermeasurement@carlsonsw.com)

## QUARRYMAN PRO AND QUARRYMAN PRO LR DIMENSIONS



Dimensions given in mm

VISIBLE AND INVISIBLE  
LASER RADIATION  
DO NOT STARE INTO BEAM  
CLASS 2 LASER PRODUCT

LASER RADIATION  
AVOID DIRECT  
EYE EXPOSURE  
CLASS 3R LASER PRODUCT

		Quarryman Pro	Quarryman Pro LR (long range)
<b>Laser module</b>			
<b>Laser classification (BS EN 60825-1: 2014)</b> (21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser No. 50, dated 24 June 2007)		Class 2*	Class 3R**
<b>Infrared laser module</b>			
<b>Type</b>		InGaAs laser diode	InGaAs laser diode
<b>Wavelength (typical)</b>		905 nm	905 nm
<b>Maximum energy per pulse</b>		2.88 µJ	4.81 µJ
<b>Beam divergence</b>		2.25 × 0.15 mrad	2.25 × 0.15 mrad
<b>Resolution</b>		1 cm	1 cm
<b>Maximum range to a passive target ***</b>		Up to 750 m	Up to 1200 m
<b>Minimum range</b>		10 m	10 m
<b>Lens aperture size and location</b>		46 mm (location at front of module)	46 mm (location at front of module)
<b>Visible laser module</b>			
<b>Type</b>		InGaAsP laser diode	InGaAsP laser diode
<b>Wavelength (typical)</b>		650 nm	650 nm
<b>Maximum power</b>		<0.6 mW (continuous wave)	<0.6 mW (continuous wave)
<b>Lens aperture size and location</b>		3 mm (location at front of module)	3 mm (location at front of module)
<b>Angle measurement</b>			
<b>Encoder type</b>		Opto-electronic encoder	Opto-electronic encoder
<b>Encoder accuracy</b>		0.02 °	0.02 °
<b>Encoder resolution</b>		0.01 °	0.01 °
<b>Range</b>	<b>Vertical</b>	-45° to +90 °	-45° to +90 °
	<b>Horizontal</b>	0° to 360 °	0° to 360 °
<b>Motion</b>		Stepper-driven worm and wheel drives in both axes with manual clutch override	Stepper-driven worm and wheel drives in both axes with manual clutch override
<b>Keyboard and display</b>			
<b>Display</b>		3.5-in, sun-readable TFT	3.5-in, sun-readable TFT
<b>Resolution</b>		320 × 240	320 × 240
<b>Keyboard</b>		17-button keypad	17-button keypad
<b>Data logging</b>			
<b>Supplied logging media</b>		8GB USB drive	8GB USB drive
<b>Compatibility</b>		USB 2.0 and 3.0	USB 2.0 and 3.0
<b>Power</b>			
<b>Supplied battery</b>		14.4 V Lithium-ion	14.4 V Lithium-ion
<b>Capacity</b>		6.2 Ah	6.2 Ah
<b>Scan time (typical)</b>		210 min	210 min
<b>Alternative power</b>		12 V dc lead acid	12 V dc lead acid
<b>Physical data</b>			
<b>Construction</b>		Machined aluminium	Machined aluminium
<b>Water and dust resistant</b>		IP66	IP66
<b>Operating temperature range****</b>		-20 °C to +45 °C	-20 °C to +45 °C
<b>Weight</b>	<b>Including tribrach</b>	8 kg	8 kg
	<b>Including tribatch and battery pack</b>	8.6 kg	8.6 kg
	<b>Including transit case and accessories</b>	16.5 kg	16.5 kg

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