

Leading the Way in Road Safety

Night and day visibility testing of road markings and road traffic signs.

Road Signs Visibility

Sign Retroreflection

Road Marking Visibility

Marking Thickness

Skid Resistance

Marking Retroreflection





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Our Portfolio

Marking Retroreflection

All types of road and airport markings. Day and night visibility. Wet and dry conditions.



ZRM 6006 RL-Qd



ZRM 6010 RL



ZRM 6013+ RL-Qd



ZRM 6014 RL-Qd



ZDR 6020 RL

Sign Reflection

Visibility measurements of traffic and road signs and reflective materials.



ZRS 6060

Marking Thickness

Dry film thickness measurement.



ZMM 5000



Static Retroreflectometers

The industry standard for day and night visibility measurements of road markings



ZRM 6006 RL-Qd



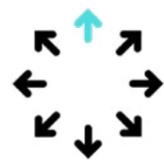
ZRM 6013+ RL-Qd



ZRM 6010 RL



ZRM 6014 RL-Qd



Versatility

Gather data from night and day visibility effectively, anytime and on any road surface.



Accuracy

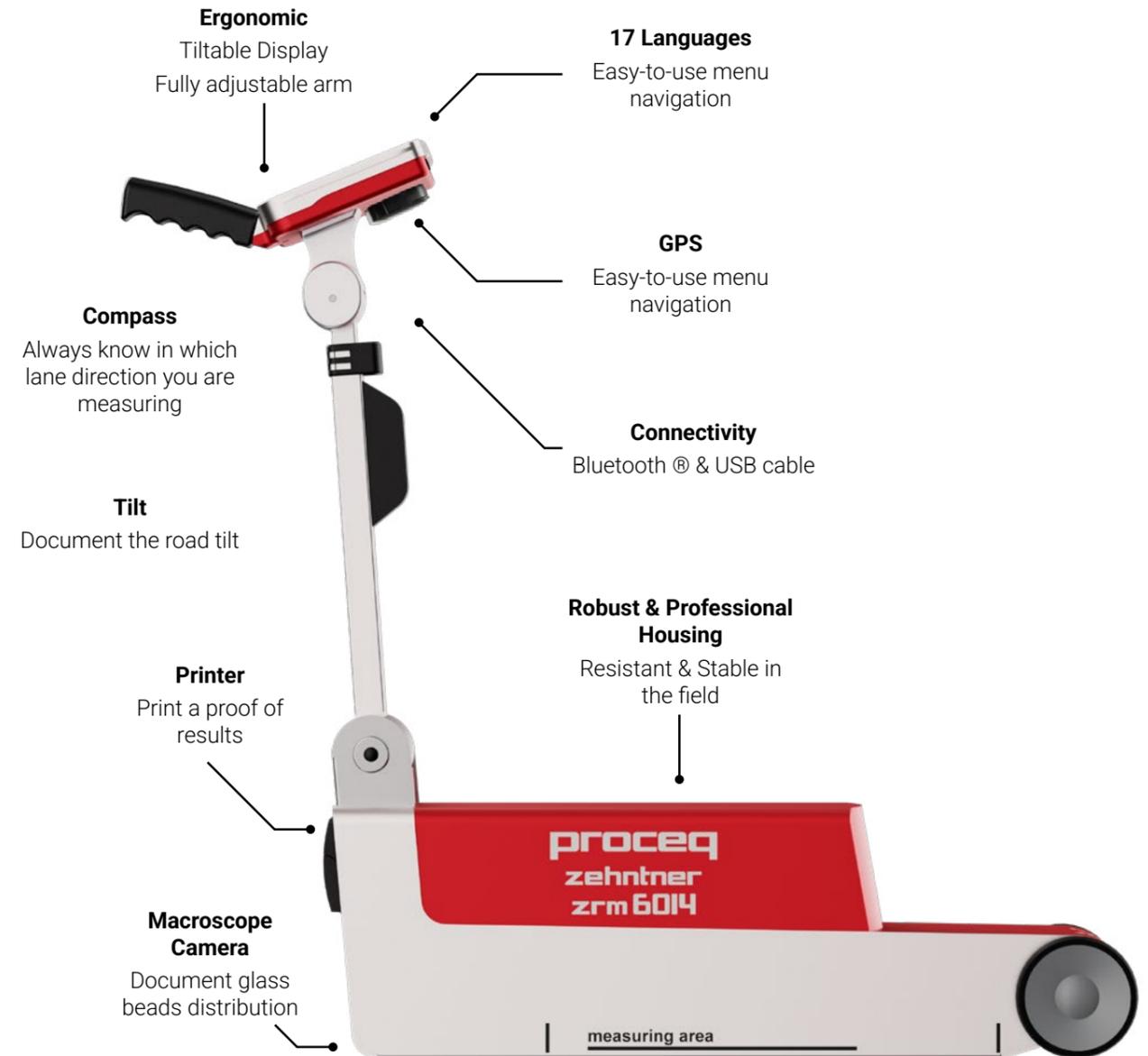
Accuracy and ultrafast retroreflection measurements (RL and Qd) in about 2 seconds thanks to intelligent electronics paired with Swiss Made optics.



Productivity

Redefine your measurements with precise geolocation and high-resolution images and create comprehensive reports quickly and with ease.

Zehntner ZRM 6014



Note: ZRM 6014 advanced shown on this page. ZRM 6014 is available in three models basic, pro & advanced depending on the chosen features.

Zehntner ZRM



Model Overview

ZRM is available in two models (Pro & Advanced) depending on the chosen features depicted in the following Model table:



X: Included
O: Extra Features

		ZRM 6006	ZRM 6013+	ZRM 6014	ZRM 6010
Measurements	RL	X	X	X	X
	Qd	X	X	X	
Measurement Modes	Single Measurement	X	X	X	X
	Average of multiple measurements		X	X	X
	Wet timer		X	X	X
Data Handling	Built-in data storage		X	X	X
	Data transfer to PC with USB		X	X	X
	Data transfer to PC with Bluetooth			X	
	Data management software		X	X	X
PRO Features	GPS		X	X	X
Advanced Features	Built-in printer		O	O	O
	Camera			O	O
	Compass			O	O
	Level meter			O	O
Handle	Short	X	X		
	Short / Long (adjustable)			X	X
Wheels			X	X	

Zehntner ZRM

Specifications

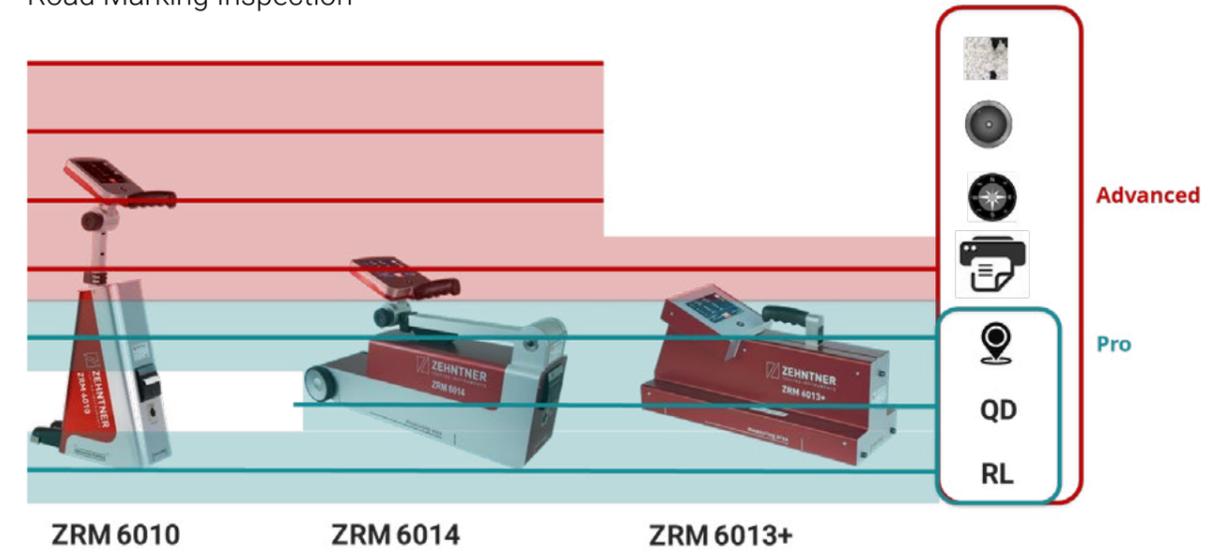


ZRM 6006 ZRM 6013+ ZRM 6014 ZRM 6010

Measuring	Area	WxL	52 x 218 mm		52 x 489mm	
	Range	RL	0 - 4'000 mcd•m-2•lx-1			
		Qd	0 - 400 mcd•m-2•lx-1		NA	
	Repeatability		± 2 %			
	Measuring time	RL/Qd	≈2 s			
Single		≈1 s				
Optical System	Observation Angle	EN 1436 & ASTM E2302	2.29°			
		ASTM E1710	1.05°			
	Built-in printer					
	Equivalent observation distance		30 m, according to CEN-geometry			
	Illumination Angle RL	EN 1436	1.24°			
ASTM E1710		88.76°				
Illumination Angle Qd		Diffuse Illumination				
Display			Transflective luminous LCD display with LED backlight	Touchscreen 5.7" color TFT (LCD), LED backlight, VGA resolution		
Data	Memory capacity		NA	1 GB internal flash memory		
			NA	1'000'000 measurements		
	Data Interface		NA	Host USB (type A)	Host USB (type A) & Bluetooth	Host USB (type A), Client Mini USB (type B)
	PC Software		NA	Mapping Tools		
Camera	Resolution		NA	NA	5-megapixel 9.5x zoom	
	Picture Size		NA	NA	2592 x 1944 px	
	Picture Format		NA	NA	Jpg	
Operating Temperature			-10°C to +50°C, non-condensing		0°C to +50°C, non-condensing	
Material Housing			Anodized Aluminium			
Weight			6.4kg	6.8kg	7.6kg 6.4kg	
Dimensions			560 x 190 x 280 mm		658.5 x 190 x 408.5 mm 340 x 152 x 575 mm	

ZRM Product Lineup

Road Marking Inspection



Zehntner ZRM 6013+



Zehntner ZRM 6014



Zehntner ZDR 6020 RL

Dynamic Retroreflectometer

Vehicle-mounted retroreflectometer for safe and efficient continuous measurements



Zehntner ZDR 6020 RL

Specifications

Measuring	Area	WxL	≥1000 mm x 880 mm
	Resolution		Data recording with 300 measurements per second
	Range	RL	0 - 4'000 mcd·m ⁻² ·lx ⁻¹
		Profiled Markings	≈20 mm (0.79")
	Distance	In front of measuring head	6 m
	Speed	Max.	150 km/h
Accuracy		Handheld precision at up to 150 km/h	
Optical System	Observation Angle	EN 1436	2.29°
		ASTM E 1710	1.05°
	Illumination Angle RL	EN 1436	1.24°
		ASTM E1710	88.76°
Illumination Angle Qd		Diffuse Illumination	
Display			11.6 in. touchscreen tablet with installed ZDR 6020 RetroGrabber software and microphone
Weight			10.5 kg
Reporting Software	PC Software		Mapping Tools
Camera	Picture interval		10m
Temperature	Operating		0°C to 55°C, non-condensing
	Storage		-15°C to +60°C, non-condensing
Dimensions			270 x 207 x 310 mm
Special Features	Languages		German, English, Spanish, French Italian, Russian, Chinese, Korean



Reliability

Vehicle-mounted with 300 measurements per second guaranteeing accurate and continuous coverage for all types of colors and road markings.



Accuracy

Handheld precision at up to 150 km/h (93 mph) without obstructing traffic and for all light conditions, even in bright sunlight.



User Experience

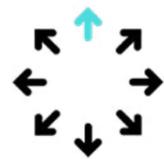
Measurements can be evaluated with the free mapping tools software on an industrial-grade touchscreen tablet with a multilingual user interface.



Zehntner ZRS 6060

Sign Retroreflectometer

Visibility measurement of traffic and road signs and reflective materials



Versatility

Superior ergonomics and screen readability, thanks to the adjustable display. Measure the night visibility of traffic signs, safety garments, conspicuity tapes, and other reflective materials.



Accuracy

A new benchmark of accuracy and robustness under any conditions in the field with optics to monitor the environment and adjust to stray light.



Productivity

Enrich your measurements with precise geolocation and high-resolution images and create comprehensive reports quickly and with ease.

Zehntner ZRS 6060



Note: ZRS 6060 is available in three models basic, pro & advanced depending on the chosen features.

Zehntner ZRS 6060



Model Selector

ZRS 6060 is available in three models (Basic, Pro & Advanced) depending on the chosen features depicted in the following Model table:



Model

Features	Basic	Pro	Advanced
RA Measurements	X	X	X
Data Transfer to PC with USB	X	X	X
Data Transfer to PC with Bluetooth	X	X	X
MappingTools PC Software	X	X	X
GPS		X	X
QR/Bar Code Reader			X
Camera			X

All three models can be selected with one of the default measurement geometries (ASTM, CEN, EN, CD, DE & ECE), with a preinstalled front mounted illumination angle adapter, as depicted in the model variant table.

If required, other illumination angle adapter variants can be purchased on the ZRS6060.

Model variant

Features	x	ASTM	CEN	EN	CD	DE	ECE*
Illumination Angle (β)	-4°	X					
	5°		X	X	X	X	
Single Measurement	5°						X
Observation (α)	0.2°/12'	X		X	X	X	
	0.33°/20'		X	X	X	X	X
	0.5°/30'	X	X		X		
	1°	X	X			X	
	1.5°						
	2°			X			

*Note: ECE variant is available in ZRS 6060 Basic & Advanced models. Contact our sales representatives if a pro model is required.

Zehntner ZRS 6060

Specifications

Anodized aluminium material



Measuring	Area	25 mm
	Range	0 - 2'000 cd·lx·1·m ⁻²
	Time	≈3 s
Memory	Type	Internal flash memory
	Size	1 GB
	Capacity	1'000'000 measurements without pictures
Interface		Host USB (type A), Client Mini USB (type B)
Touchscreen Display		3.5" color TFT (LCD), LED backlight, HVGA resolution
Camera	Resolution	5-megapixel
	Picture Size	2592 x 1944 px JPG
Battery		Li-Ion 14.4 V / 6.5 Ah
Operating Conditions		-10°C to +55°C
		20 to 85% rH
Storage Conditions		-20°C to +55°C
	Barcode reader	20 to 90% rH
Material Housing		Anodized aluminium
Dimensions	LxWxH	220 x 85 x 290 mm
Weight		1.9kg net without options

Zehntner ZRS 6060

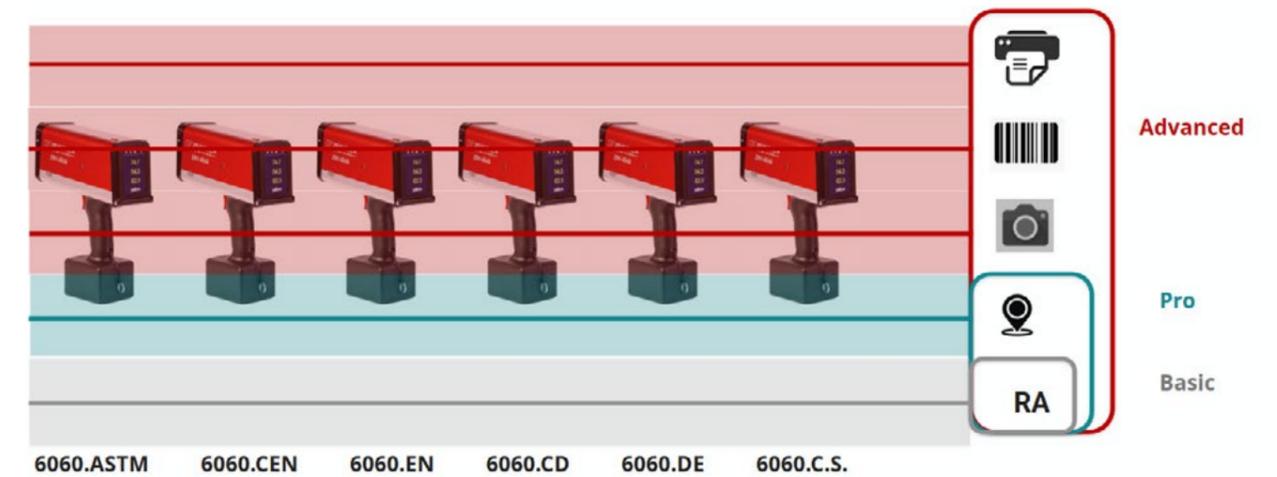
Accessories

		Model variant					
		ASTM	CEN	EN	CD	DE	ECE*
Optional adapters for Illumination Angle (β_1) 	10°	X	X	X	X	X	
	15°	X	X	X	X	X	
	20°	X	X	X	X	X	
	30°	X	X	X	X	X	X
	40°	X	X	X	X	X	
Voltage converter to be plugged into the cigarette lighter DC/AC 12V/230V 		X	X	X	X	X	X
Portable USB-printer Only compatible with ZRS 6060 Advanced 		X	X	X	X	X	
Handle 1.2m incl. fork 		X	X	X	X	X	X
Extendable handle 1.7-3m incl. fork		X	X	X	X	X	X
Extendable handle 2.2-4m incl. fork 		X	X	X	X	X	X

* ECE variant is using β_2 angle

Product Lineup

Road Marking Inspection



Zehntner ZRS 6060



Zehntner ZMM 5000

Road Marking Thickness

Unique digital dry film and road markings gauge



Zehntner ZMM 5000

Specifications

Material	Red Anodised Aluminium
Measuring Range	-12.5mm to/bis +12.5mm (optional)
Resolution	10µm
Bearing Area (WxL)	Min. 67 x 100 mm
Display	Digital
Dimensions (LxWxH)	180 x 70 x 80 mm
Weight	880g



Ease of Use

Superior ergonomics and screen readability thanks to the digital adjustable display, measuring results within seconds.



Reliability

Sturdy construction that can extract representative measurements on wide road markings with its optional measuring bridge.



Performance

Reliable measuring, including those relative to the substrate or to the marking itself (upwards and downwards measurements).



Zehntner Mapping Tools



For ZRS 6060, ZRM 6014 & ZRM 6013+

The complementary MappingTools, versatile mapping and data analysis software makes administration & analysis of your measurements simple and easy. View your data, create PDF reports, export your data to XLS or to KMZ format to display your data with Google Earth™.

MappingTools is compatible with Windows® 10, Windows® 8, Windows® 7, Windows Vista® & Windows® XP SP2.



For any more information, feel free to schedule a demo.

Contact us!



<https://www.screeningeagle.com/en/contact-us>

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