



Retrosign GR3

Specifications

Optical specifications GR3 ASTM

Geometry:	ASTM-E-1709
· Entrance angle:	-4°
· Observation angle:	0.2°, 0.5°, 1.0°
· Light source angular aperture:	0.1°
· Receiver angular aperture:	0.1°
· Field of measurement, Ø:	30 mm/1.2 inch and 15 mm /0.6 in

Optical specifications GR3 CEN

Geometry:	EN 12899
· Entrance angle:	5°
· Observation angle:	0.33°, 0.5°, 1.0°
· Light source angular aperture:	0.16°
· Receiver angular aperture:	0.16°
· Field of measurement, Ø	30 mm/1.2 inch / 15 mm /0.6 inch

Other optical specifications:

Field of measurement, Ø:	30 mm/1.2 inch / 15 mm /0.6 in
Spectral responsivity: Illuminant A + V(λ) efficiency according to ASTM E and 1709 section 6.4.2. for selected filters	
Range (cd·lx ⁻¹ ·m ⁻²):	0 – 2000

Instrument dimensions

Length:	295 mm / 11.6 in
Width:	83 mm / 3.3 in
Height:	324 mm / 12.8 in
Weight:	2.1 kg / 4.6 lbs

Compliance

EMC:	EN 61326: 2007
Low voltage:	Not applicable, battery driven
ROHS:	Compliance to the requirement of and its exception. Directive 2002/95/EC; 2002/96/EC Annex 1A

Electrical characteristics

RFID tag reader:	HF (13.56 MHz; ISO 15693 and ISO 1443A/B)
· Reading distance:	30 mm / 1,2 in
Barcode reader:	617nm highly visible LED
· Scan angle:	Up to 40°
· Reading distance:	Up to 90 cm / 3 feet
Power supply:	Rechargeable and replaceable NiMH 9.6 V

External charger:

· Main:	230 V / 50 Hz
· Optional:	110 V / 60 Hz
· Charge time:	approx. 15 minutes
Data memory:	> 250.000 measurements
Interface:	USB

Environmental specification

Temperature:	
· Operating:	0°C to +50°C / 32°F to 122°F
· Storage:	-15°C to +55°C / 5°F to 131°F
Humidity:	non condensing

Timing

Measurement time:	2 sec.
-------------------	--------

Standard delivery

Carrying case
Calibration standard
Software program
Battery charger
Ø15 aperture reducer
Small supporting plate
Lens cover
Communication cable
Quick guide
User manual on CD/DVD

Options

Extension Pole Kit, 1.5-2.7 m / 4.9-8.9 feet
Extra battery
Ø10 aperture reducer
Calibration certificate
Calibration service
Lens attachment for additional entrance angles of 30° and 40°
Bluetooth
RFID tag reader
Barcode reader
High precision GPS unit