

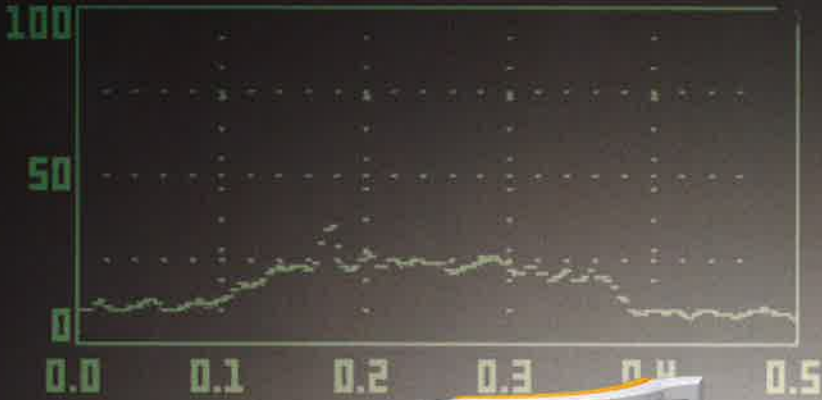


Technology for Life Science

Quantitative measurement equipment
for flare in the anterior chamber

Laser Flare Meter

KOWA FM-600



BG1: 9.7
 BG2: 8.1 (8 8%)
 SIG: 21.8

FLARE: 12.9



N	FLARE	U/A
1	3.5	13.5
2	6.4	11.9
3	7.0	13.8 C
4	6.0	13.9
5	5.4	12.5 B
6	6.7	10.8
AV. :		12.7
S.D. :		1.2

User-friendly, patient-friendly, designed to be the best partner.

The KOWA FM-600 offers smooth and simple measurement of aqueous flare in the anterior chamber. Front alignment mode and standard side view alignment mode are available.

Compact Simple & Quick Easy Alignment

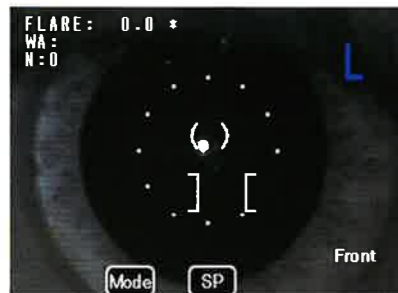
All of Kowa's manufacturing expertise were put together to design a flare meter with all necessary functions, in a compact body.

With operations made while facing the patient and all buttons located within hands reach, the flare meter is easier to use than ever.

Quick and precise measurement is capable with SP (small pupil) mode and front / side view alignment modes.

Monitor guide for easy and quick alignment

Alignment

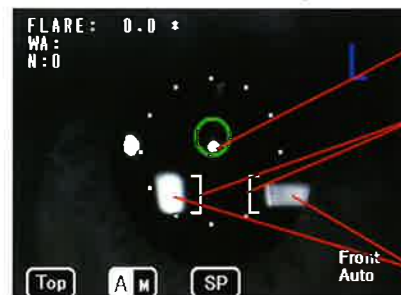


Working distance adjustment
Position the alignment dot in the center circle while bringing the dot into focus.



It is possible to switch the alignment mode by pressing the front view button.

Front view alignment

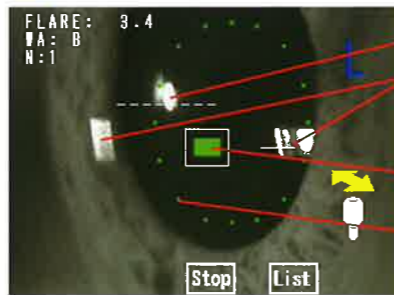


Alignment dot
Alignment brackets
Position the left and right laser beams while bringing outside of the alignment brackets.
Laser beam

Measuring point adjustment

Press the measurement button and scan laser. Measurement is possible when the center circle for alignment is green.

Side view alignment

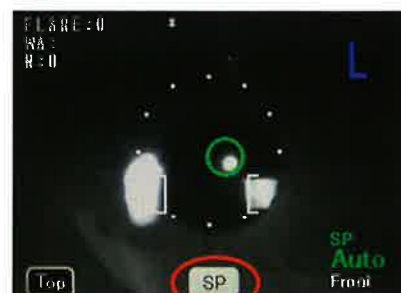


Laser spot
Laser beam
Measurement window
Minimum pupil limit

Measuring point adjustment

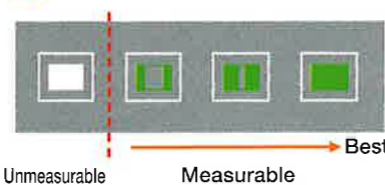
Measurement is possible when the measurement window at the center is green.

SP mode



The alignment position for patients with small pupils displays when the SP button is pressed.

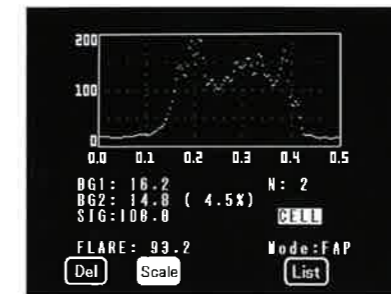
Measurement window



The color and view of the measurement window depends on the alignment. Measurement cannot be made when the central square is white; measurement is possible when the same square is green.



Measurement results



Graph result

The scattered light is converted into an electrical signal and its intensity is displayed as flare value on the LCD monitor. All flare and dispersion data is analyzed, providing reliable and accurate measurements.

N	BG	(X)	FLARE	W/A	Mode
1	8.4	2.2	2.4	B	FM
2	7.5	17.2	2.5	B	FM
3	7.1	13.8	4.1	B	FM
4	7.2	9.8	2.9	B	FA
5	7.7	16.1	2.9	B	FA
6	7.4	1.2	2.4	B	SM
7	7.4	7.5	4.1	B	SM
AV :		3.2			
S.D. :		0.8			

Report result

Printout



N	BG	(%)	FLARE	W/A
1	47.9	15.5	17.7	B
2	6.4	7.4	13.1	
3	6.2	1.7	16.1	
4	7.2	8.9	16.3	C
5	6.6	0.8	14.9	
6	7.2	6.6	14.8	
7	7.3	20.6	15.6	B
8	6.8	9.2	16.2	
AV :		15.6		
S.D. :		1.4		

Built-in thermal printer with easy paper change supports quick operations.

Calibration



Pre-installed calibrator on the body for easy calibration.

Measurement principle

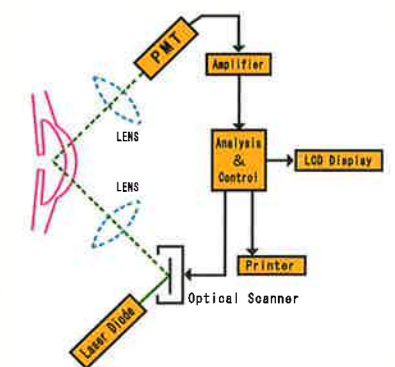
FM-600 is based on the measurement principle of laser light scattering detection. The instrument uses a diode laser beam to scan a measuring window that is projected inside the anterior chamber of the eye.

As an aqueous protein (component of inflammation) passes through the focal point of the laser, light scattering occurs.

The intensity of the scattered light (directly proportional to the amount of protein particles-flare) is detected by a photomultiplier tube (PMT), which generates an electrical signal.

This signal is immediately digitized to eliminate outside noise interference and are processed by a computer which displays the results for user analysis.

The unit of measurement employed by FM-600 is "Photon Count" per millisecond.





Technology for Life Science

Laser Flare Meter

KOWA FM-600

Specifications

Scanning laser source	Laser diode, Wavelength : 635 nm, Intensity : 35 μ W
Photoreceiver element	Photomultiplier tube (PMT)
Measurement range	1~500 photon counts/ms
Measurement accuracy	\pm 5% ※
Measurement area	0.3(H) \times 0.5(W) mm
Measurement time	0.5 seconds
Measurement distance	81 mm (Patient's eye to photoreceiver lens)
Printer	58 mm wide thermal printer
Monitor	5.6 inch TFT color LCD
Base segment working range	Lengthwise : 37 mm, Crosswise : 89 mm, Vertical : 25 mm
Chin rest working range	55 mm (Electrically operated)
Energy saving function	Provided
Interface	ID input : PS/2 (a numerical keypad and a barcode reader) Data output : RS-232C
Power supply	Input : AC100-230 V 50/60 Hz Power consumption : 80 VA / 100 VA (maximum)
Dimensions, weight	274(W) \times 457(D) \times 458(H) mm, 18 kg / 40 lbs

※ The specified accuracy applies when the conditions below are satisfied.

- The device is used under the same environment as it was calibrated.
- The device is used before calibration due data.
- The internal temperature of the device is stabilized (in approx. 1 hour after turning the power ON).

Accessory Light shade



CE 0197

Images in the LCD monitor are compositions.

Specifications and appearances are subject to change without notice.

Distribution name : KOWA FM-600



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