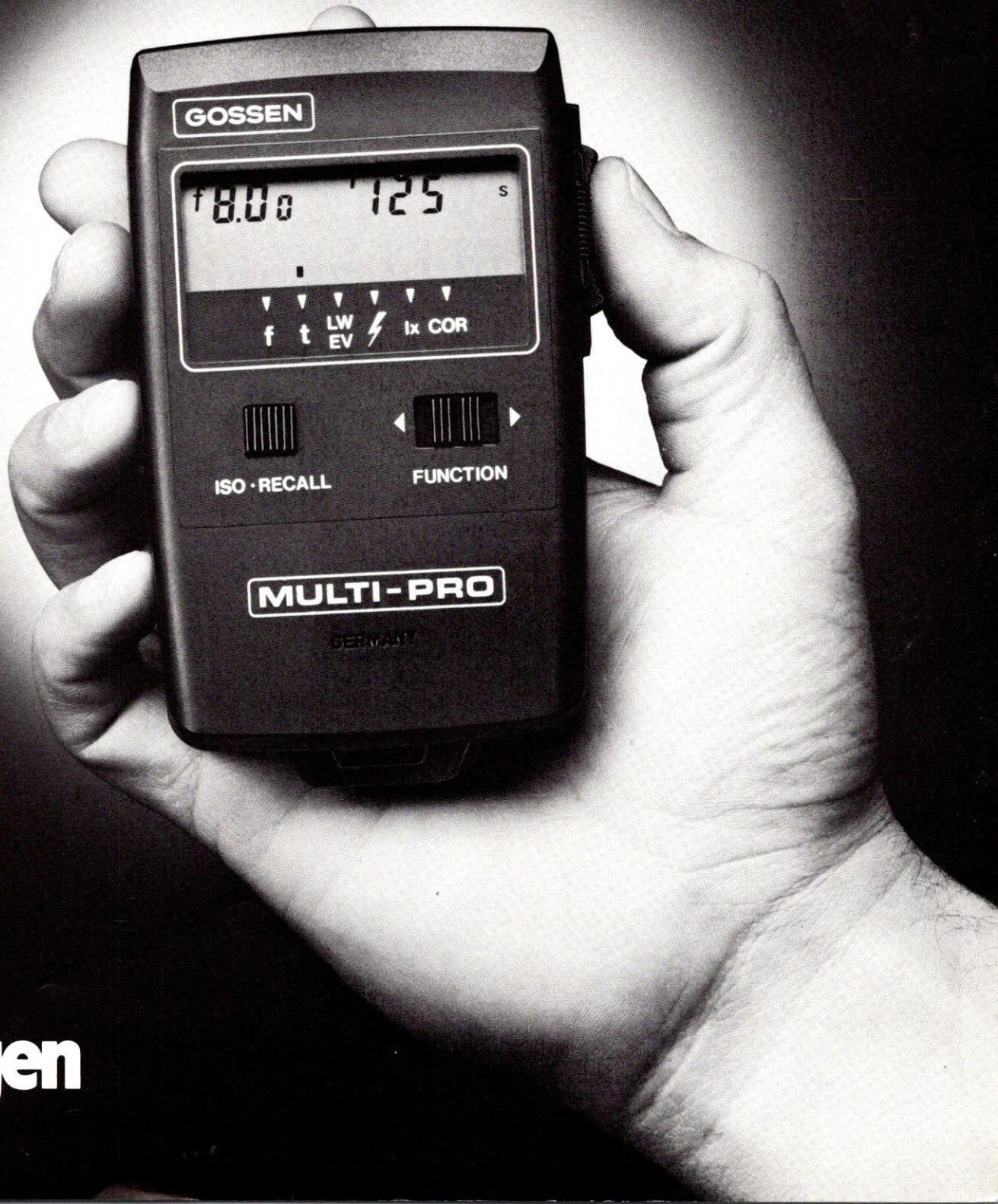


GOSSEN METERS

The standard of performance in
light measuring instruments.



bogen

Gossen hand-held meters give you the creative edge.

Why hand-held meters?

Your creativity demands the right light reading.

In a world where so many cameras have built-in, through-the-lens metering systems, who needs a separate hand-held meter? The answer is, "If you're serious about photography, you do."

The difference between a built-in meter and a Gossen is, quite frankly, the difference between a snapshooter and a serious photographer. The snapshooter accepts the approximations of an averaging meter and simply throws the exceptions in the wastebasket. But a professional photographer can't afford to work that way, and the serious amateur won't.

Why Gossen hand-held light meters?

Built-in meters give you average exposures for average scenes. For a Gossen meter, that's just the beginning.

Modern photographic films have remarkable latitude, especially color negative material and can produce acceptable results over a range of exposures. But the experienced photographer knows the difference between acceptable and optimum exposure because there's no substitute for the best.

Ease and versatility.

Reflected Light

Measuring from the camera towards the subject.



Incident Light

Measuring from the subject towards the camera.



Ergonomically designed system.

As you expand your photographic expertise you'll realize the need to know what the optimum exposure is – not depending solely on bracketing and the film's exposure latitude.

All photographic metering systems are based on the principle of the gray card; that all light and colors of a scene can, for measurement purposes, be represented by a card; neutral gray with no color cast and reflecting 18% of the light cast on it. When the light distribution in a scene is not "average" you have to either measure all anomalous areas (those that are very bright or very dark) individually, or use a device that measures incident light (how much is falling on the subject).

All Gossen exposure meters measure both reflected and incident light, so even the simplest models provide better exposure information than the metering system of a camera.

Gossen gives you all the information.

In order to get the correct exposure, you not only have to know the average reading, but the total range of brightness in the scene.

Gossen's Ultra-Pro and Multi-Pro digital exposure meters do it all for you. They provide accurate digital readouts of continuous light and flash for both the incident and reflected light. And they deliver those readouts in either exposure value or aperture/shutter combinations. The flash and ambient light are measured simultaneously and the readouts give you the appropriate exposure settings in addition to the difference in f-stops between the two readings.

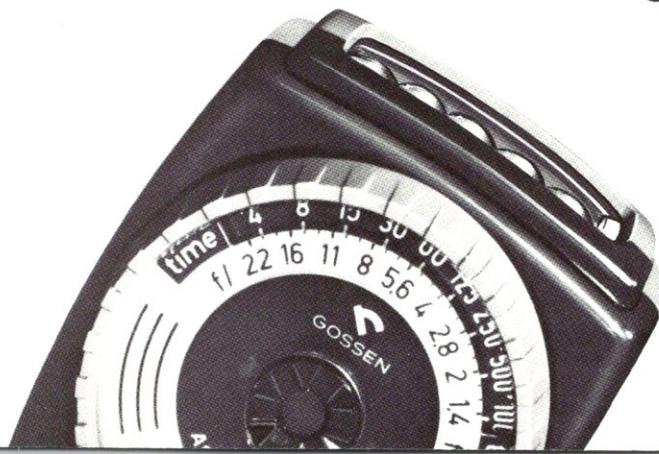
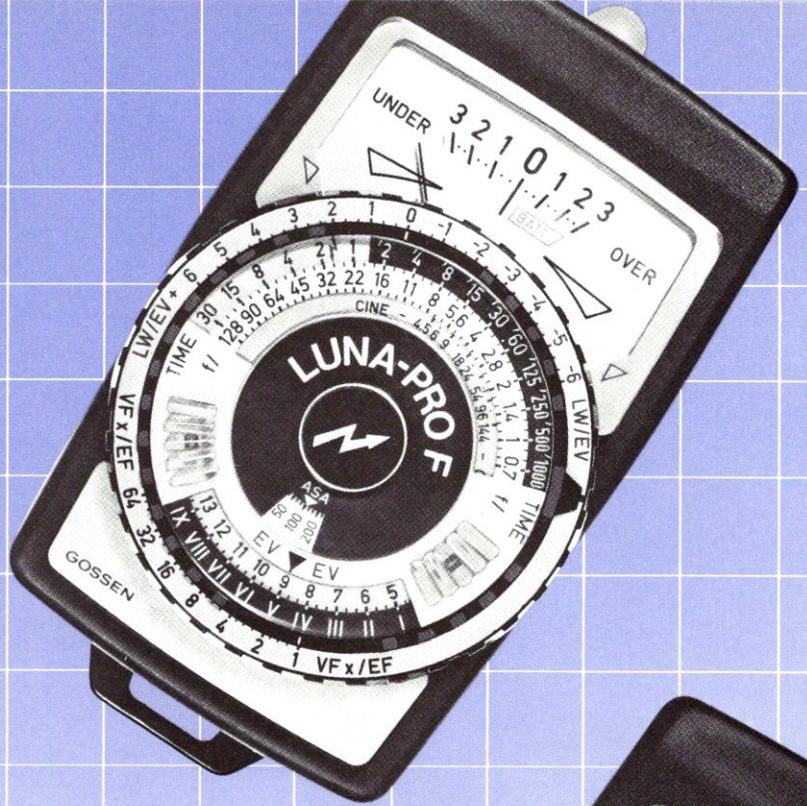
Other Gossen meters operate on the zero metering principle (The Null System). You simply take one reading, center the indicating needle pointer with the outer ring of the scale and see not only an exposure reading, but all of the other lens and shutter settings possible at that light level. No more reading a numerical value, setting it on a dial and then reading out the exposure.

This "Null" metering method is obviously quicker and easier. Indeed, it's the method used with many of the world's most precise laboratory instruments.

Other meters may give you midtone readings, but unless you know the full range of brightness in the scene you may lose critical highlight and shadow detail.

A ± 3 EV scale makes it easy to compare other areas with the key area on which you've "nulled." It's ideal for scene-brightness measurements and zone-system applications. And it works the same regardless of light level – no calculations. Select your key area, null for that area, and then read the intensity of other areas of the scene in ratio to the key area directly off the meter face.

In addition, null metering can be used to adjust your lighting to match your mood or the tonal range of your film. At the "zero" position, you get a midtone reading (other meters settle for just this one tonal value). With the unique scale calibrations of Gossen's null meters, you can place the tonal value exactly where you want it.





Multi-Pro

State-of-the-art technology for all of today's demanding requirements.

The Multi-Pro light meter represents the latest advances in Gossen precision technology. Featuring digital readout of flash and continuous light. The versatility of the Multi-Pro is further enhanced by the meter's capability with all of the standard Luna-Pro system accessories.

Analysis of flash readings.

Both flash and ambient light are simultaneously measured and readouts indicate the appropriate exposure settings as well as the difference in f-stops between the two readings. This is extremely useful when using fill-flash and when measuring flash to daylight ratios. And you have full flash capability and analysis whether you work with or without a sync cord.

Quick and convenient multiple flash.

There's no need to fire the flash numerous times to measure multiple flash exposures. Based on one flash, the desired working aperture is selected and the meter automatically calculates the necessary number of flashes.

It's highly adaptable.

For ambient light measurements, the Multi-Pro supplies readouts in either exposure value (EV) or aperture/shutter speed combinations — enabling the pre-selection of a working aperture or shutter speed priority mode. Once a reading is taken, the digital readout gives all valid combinations. In addition, a moving bar graph extending from -4 to +4 stops of the primary measurement is provided.

The ultimate in versatility.

The Multi-Pro's programmable memory allows for compensation for filters, bellows extension or additional accessories. It can average 15 separate incident and reflected readings without accessories, and supply direct photometric readouts in lux.

For all its sophistication, it's simple.

Operation couldn't be easier — all Multi-Pro measurements can be taken one-handedly. And it's powered by a standard 9 volt battery, with automatic battery check built in.

Technical Specifications

Measuring Ranges:

Ambient light EV -2 to +18 at ISO 100
Flash f 2.8 to f 45 at ISO 100
Lux range 0.680 to 710,000 lx

Indicating/Display Ranges:

Film speed 1 to 800,000
Apertures f 0.7 to f 90 9/10
Shutter speeds 1/8000 sec. to 8 hours
Exposure values EV -9.9 to 99.9

Other Data:

Flash sync times ... 1/60, 1/90, 1/125, 1/250
EV corrections -7.9 to +7.9
Extension factors 1.0 to 239
Duration of readout 2 minutes

Readiness for

flash measuring 45 seconds
Contrast reading range ± 4 stops (in ½ stops)

Measuring Angle:

Continuous light 30° reflected light mode
Flash 20° reflected light mode

Continuous light

and flash 180° incident light mode
Power source 9 volt (type MN 1604)
Dimensions 2 5/8" x 3 3/8" x 1"
Weight 7 oz. (with battery)

Order Code 4035



Ultra-Pro

The most complete photographic and photometric meter ever made.

Now there is a single meter which does the work of most other meters and more ...and does it more quickly, simply and reliably as well. The Ultra-Pro is indeed a new definition of meter technology.

- Reads flash as well as continuous light
- Full range of photographic and photometric readouts/functions
- Direct readout of brightness range and contrast, lighting and flash-to-daylight ratios
- Fast, easy to use
- Simple, one-handed operation
- Microprocessor-controlled
- Solid-state design
- LCD digital readout
- Reads in tenths of a stop
- Built-in 5-stop flash range extender with automatic correction for high-intensity lighting
- Built-in timer
- Silicon blue photo sensor
- Uses standard 9 volt battery
- Full range of accessories that automatically adjust.

So many functions, so easy to use.

Even though the Ultra-Pro is many meters in one, it is actually faster and simpler to use than most ordinary meters. How can so many functions be controlled so simply? Solid-state microprocessor technology and user-oriented design. A single function switch can be set for any of 16 modes of operation. All controls are conveniently located for quick, easy one-handed operation.

The Ultra-Pro also features automatic shutoff for battery conservation – but all pre-selected values such as ISO, f-stop and shutter speed are *retained in memory* until you wish to change them.

Technical Specifications

Measuring Ranges:

Ambient	EV -4 to EV 18 at 21 DIN, 100 ASA
Flash	28.8 lxs to 7,360/236,000 lxs*
Color	2600°K to 20,000°K
Density	D = 0.00 to 3.00
Lux	0.175 to 350,000 lx
Footcandles	0.016 to 32,000 fc
Candelas per square meter	0.007 to 14,000cd/m ²
Lux-seconds	28.8 to 7,360/236,000 lxs*
Footcandle seconds	2.7 to 684/21,900 fcs
Candela seconds per square meter	1.2 to 295/9440cds/m ² *

Display Ranges:

Film speed	1-8000,000 ISO
DIN	1-60 DIN
Aperture	f 0.7 to f 90.9
Shutter speeds	1/4,000 second to 8 hours
Timer	1 second to 126 minutes
Exposure corrections	EV -79 to EV +7.9 EF 1.0 to 239
Photo cell	silicon blue cell
Angle of coverage	30° reflected (ambient) 20° reflected (flash) 180° incident (ambient/flash)
Power source	9 volt (type MN 1604)
Dimensions	5½" x 2¾" x 1⅜"
Weight	8.2 oz. (with battery)

* In high-intensity mode

Reflected or incident readings without scale-switching or accessories.

No accessories to worry about, no switching from one scale to another – the Ultra-Pro measures reflected or incident light with your choice of "aperture-preferred" or "shutter-preferred" operation. Simply program either f-stop or shutter speed – it will be retained in the memory until you change it – press the measuring switch and the Ultra-Pro instantly displays the reading within 0.1 stop.

The Ultra-Pro has the greatest measuring range of any hand-held light meter. And with an ISO range of 1-800,000, f-stops from f 0.7 – f 90 and exposure times from 1/4000th sec. to 8 hours, the Ultra-Pro is ready for any extreme.

Microprocessor self-diagnostics.

Whenever the meter battery is replaced the meter performs an automatic self-check. All meter functions are displayed simultaneously, indicating proper operation of the microprocessor.

An indicator on the LCD display signals when batteries are low and in need of replacement.

Flash metering, cord or cordless, single or multiple.

Whether you prefer cord or cordless operation, the Ultra-Pro will display the proper f-stop when measuring electronic flash. You can preselect shutter speeds or

Order Code 4040

measuring times from 1 second to 1/1,000 second.

For multiple flash, simply fire the flash once and the meter will compute the number of multiple flashes necessary to achieve the f-stop you want. No need to repetitively fire the flash – the Ultra-Pro does the work for you.

You can time long exposures from 1 second to 126 minutes.

When the meter indicates an exposure time of one second or more, that time is automatically transferred to the timer. Switching to the timer function will now allow you to time that exposure. During the last five seconds of the "count-down" there is an audible signal each second. You can also program the timer manually and a "hold" capability allows you to pause during timer "countdown."

Direct readouts for complete control of lighting.

Where an ordinary meter gives you only a single measurement, the Ultra-Pro gives you a choice.

You can take a single, simple measurement or you can utilize fully the meter's capability to provide you with all the critical information you need for perfect exposures.

Direct readouts of the scene-brightness range, contrast ratio, lighting ratio, and even the flash-to-daylight ratio! You can, for example, measure two extremes of contrast (highlight/shadow) and get a mean value – or the meter can calculate an average for up to 15 separate readings.

With flash, the contrast scale will display by how many f-stops the flash increased the ambient light level.

Programmable exposure corrections.

With a flash, the contrast/EV scale can be used to indicate by how much the ambient light level has been increased, thus showing how much overall scene contrast has changed. This feature is also valuable for balancing flash indoors when the scene includes an exterior view, for example, through a window.

Photometric readings for special applications.

There are many situations where actual light values are more important than photographic exposure values. By simply sliding a switch you can measure:

- Density values – used for transmitted or reflected measurements of density when evaluating negatives and transparencies in printing.
- Lux (lx)/footcandles (fc) – measurements of illuminance used in motion pictures, TV, lighting design and engineering.
- Candelas per square meter (cd/m^2) – a measure of luminance for reading screen brightness in theaters and CRT displays.
- Lux seconds (lx·s)/footcandle seconds (fcs) – illuminance values used in measuring strength of light from a flash.
- Candela seconds per square meter (cd/m^2) – a luminance value used to measure reflected light of flash.

The Ultra-Pro handles them all. And in many cases, the Ultra-Pro will automatically make conversions when you switch from one photometric value to another.

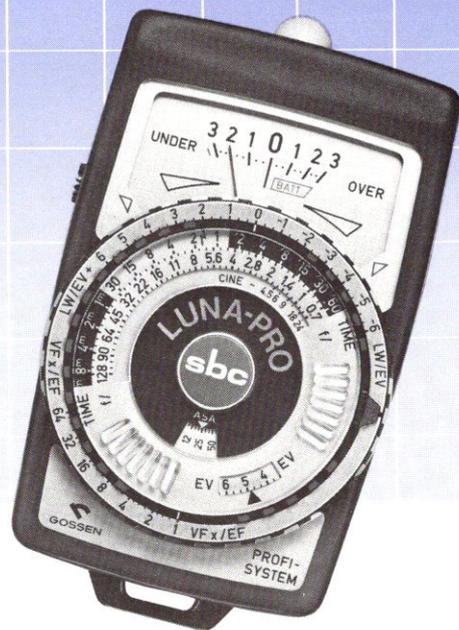
Complete range of accessories.

The Ultra-Pro accepts all existing Gossen accessories (see Page X). Two of these accessories, the Luna-Color and Profi-Select TTL, have specifically designated functions on the Ultra-Pro for optimum ease of use.

With the addition of the Luna-Color, the Ultra-Pro becomes a digital color-temperature meter.

The readout is in ° Kelvin and indicates which correction filters are needed for color balance for the type of film you are using.

Using the Profi-Select TTL ambient light and flash measurements can be taken at the film plane of a view camera, automatically taking bellows factors and filters into account! An optional 4" x 5" cassette helps position the probe accurately.



Luna-Pro sbc

The heart of a complete exposure-metering system. A full range of optional accessories – many having automatic calibration – make it instantly ready for any shooting situation, including electronic flash.

The versatile Luna-Pro sbc.

Featuring the latest generation silicon blue cell, the Luna Pro sbc reads accurately down to – 4 EV for extremely low light capability. It also features the accurate null metering system; take one reading, center the indicating needle pointer with the outer ring of the scale and see only an exposure reading, but all of the other lens and shutter settings possible at that light level.

The Luna-Pro sbc also provides a + 3 f-stop scale for direct readout of brightness range, Zone System values and lighting ratios.

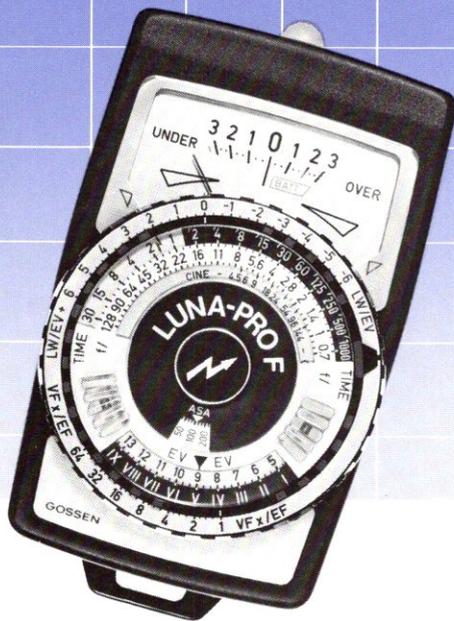
There's much more. Dial settings are adjustable so that exposure factor corrections for bellows, filters, etc., can be automatically compensated for. An indicator reminds you when this feature is being used. The broad range of accessories available for the Luna-Pro sbc sets this meter distinctly above many others. And to make them even more practical, several accessories automatically reprogram the meter response for direct reading.

A standard 9V battery powers the system. The range of f-stops and ISO values is even greater than the standard Luna-Pro: apertures from 0.7 to f/128 and ISO values up to 100,000. Of course, you can take both incident and reflected readings with the built-in sliding hemispheric diffuser. Check the specs for the full story on the extraordinary Luna-Pro sbc.

Technical Specifications

Photo cell	.....	Silicon blue cell
Angle of coverage	.....	30° reflected, 180° incident
Sensitivity	.....	0.016 to 32,000 footcandles 0.002 to 4,000 footlamberts – 4 to +17 EV at ISO 100
Power source	.....	9 volt (Type MN 1604)
Dimensions	.....	4¾" x 1¾" x 2¾"
Weight	.....	8¼ oz.
Scale Ranges:		
Cine	.....	4.5 to 144 fps
Exposure values	.....	– 8 to 24 EV
Shutter speeds	.....	1/4,000 sec. to 8 hours
Apertures	.....	f 0.7 to f 128
Film speed	.....	ISO 0.8 to 100,000/0 to 51 DIN

Order Code 4025



Luna-Pro F

The Luna-Pro F is very flexible, versatile and adaptable photographic light-metering system while at the same time being very simple to use.

Measure continuous light and flash.

One unique meter for measuring both continuous light and flash. A silicon blue sensor for instantaneous reading of high and low light levels. Incorporating a null meter read-out, the Luna-Pro F is ideally suited for determining scene-brightness range and lighting ratios, which can be read directly from the meter at any light level.

The Luna-Pro F delivers both incident- and reflected-light measurements without scale switching or accessories, and enables cordless readings of single or multiple flash.

Other capabilities include direct measurement of zone-system values; an electronic sample and hold circuit, which stores light measurement for reading in remote areas; read-out of all applicable aperture/shutter speed combinations; programmable exposure-factor corrections for working with bellows, filters, etc.; and automatic shutoff to extend battery life.

A full system of interchangeable accessories expand the measuring capabilities of this fine instrument into all areas of photography, exceeding even the most demanding requirements of professionals working on location, studio, darkroom and laboratory assignments.

Technical Specifications

Photo cell	..... Silicon blue cell
Angle of coverage	..... 30° reflected, 180° incident
Sensitivity	..... 0.125 to 32,000 footcandles 0.016 to 4,000 footlamberts - 1 to +17EV at ISO 100 28.8 lxs. to 7360 lxs. (flash)
Power source	..... 9 volt (Type MN 1604)
Dimensions	..... 4¾" x 1¾" x 2¾"
Weight	..... 8½ oz. (with battery)

Scale Ranges:

Cine	..... 4.5 to 144 fps
Exposure values	..... - 8 to 24EV
Shutter speeds	..... 1/4,000 sec. to 8 hours
Apertures	..... f 0.7 to f 128
Film speeds	..... ISO 0.8 to 100,000/0 to 51 DIN

Order Code 4030



Luna-Pro

Since its introduction in 1963, acknowledged as the world standard for accuracy, reliability and range. And, with its five optional accessories, the most versatile Cds system meter ever made.

The world standard.

The Luna-Pro is the choice of professional photographers, as well as discerning amateurs, all over the world. Experience-proven – it provides accurate reflected- or incident-light readings in all kinds of light, from a flickering candle to a bright summer's sun. As a system meter, you can be sure it will provide correct exposures in any situation. More than just a superb hand-held meter, the Luna-Pro's wide range of optional accessories further increase its versatility.

The Luna-Pro can be adapted to calculate the correct exposure for photomicrography with the Microscope accessory. It can be turned into a dual angle "spot meter" with the Variable Angle accessory. It can be used to take through-the-lens readings from a large format camera's ground glass with the Flexible Fiber Optics Probe accessory, or you can use it for copy work with the Copy accessory. And it comes with you into the darkroom as well. The enlarging accessory helps to find the right enlarger exposure for your color and black & white prints.

Proven accuracy. Proven reliability. Proven versatility. That's why pros have chosen the Luna-Pro since its introduction.

Technical Specifications

Photo cell	..... Cds (Cadmium sulphide)
Angle of coverage	..... 30° reflected, 180° incident
Sensitivity	..... 0.016 to 32,000 footcandles 0.002 to 4,000 footlamberts - 4 to +17EV at ISO 100
Power source	..... two 1.35 volt mercury batteries
Dimensions	..... 2½" x 1¼" x 4"
Weight	..... 7 oz. (with batteries)

Scale Ranges:

Cine	..... 8 to 128 fps
Exposure values	..... - 8 to 24EV
Shutter speeds	..... 1/4,000 sec. to 8 hours
Apertures	..... f 1 to f 90
Film speeds	..... ISO 0.8 to 25,000/0 to 45 DIN

Order Code 4020



Luna-Lux

Luna-Lux combines the advantages of a silicon blue sensor with a null metering readout using LED indicators so you can set it in an instant, read it at a glance. The three LEDs give quick, easy determination of all exposure information, including light values, shutter speed, apertures and even zone-system values.

Full-featured system meter.

Exposure-factor corrections can be programmed in for working with bellows, filters, etc. Readings can be stored in the meter's memory for instant recall. Of course, there are both reflected and incident readings without scale switching or accessories. A complete system of accessories is available, including Variable Angle, Microscope, Fiber Optics Probe, Repro/Copy and Enlarging attachments, thus expanding the meter's scope of light-measuring applications far beyond most ordinary meters.

Technical Specifications

Photo cell	Silicon blue cell
Angle of coverage	30° reflected, 180° incident
Sensitivity	0.5 to 32,000 footcandles 0.064 to 4,000 footlamberts +1 to +17EV at ISO 100
Power source	9 volt (Type MN 1604)
Dimensions	4 3/4" x 1 3/4" x 2 3/4"
Weight	7 3/4 oz. (with battery)

Scale Ranges:

Cine	4.5 to 144 fps
Exposure values	-8 to 24EV
Shutter speeds	1/4,000 sec. to 8 hours
Apertures	f 0.7 to f 128
Film speeds	ISO 0.8 to 25,000/0 to 51 DIN

Order Code 4015



N100

Here's the one built for precise and easy handling. The Gossen N100 features a null meter movement for faster, easier readings – either reflected or incident light (with built-in sliding hemispheric diffuser). Set the ISO, center the needle, then read the apertures/shutter speed combinations directly from a simplified computer dial. It's that quick and easy!

Technical Specifications

Photo cell	Cds (Cadmium sulphide)
Angle of coverage	30° reflected, 180° incident
Sensitivity	8 to 32,000 footcandles 1 to 4,000 footlamberts +3 to +17EV at ISO 100
Power source	2 - PX13 or PX625 Mercury cells
Dimensions	2 1/4" x 3 1/4" x 1 1/4"
Weight	3 oz. (with batteries)

Scale Ranges:

Cine	8 to 128 fps
Exposure values	-1 to 24EV
Shutter speeds	1/2,000 sec. to 1 hour
Apertures	f 1 to f 45
Film speeds	ISO 6 to 12,500

Order Code 4010



Scout 2

A trim, smart investment to improve your photographic fun. Makes every picture count, color or black & white – gives you full value for every film dollar. Pays for itself quickly.

Every inch a Gossen, the Scout 2 measures reflected and incident light with a built-in sliding diffuser. Reads the slightest variations in your subject's brightness or illumination. Features easy-reading dials and one-handed operation.

Technical Specifications

Photo cell	Selenium
Angle of coverage	49° horizontal, 45° vertical reflected, 180° incident
Sensitivity	128 to 32,000 footcandles 16 to 4,000 footlamberts +7 to +17EV at ISO 100
Power source	No battery needed
Dimensions	2 1/4" x 3" x 1"
Weight	Less than 2 oz.
Scale Ranges:	
Cine	4.5 to 96 fps
Shutter speeds	1/1,000 sec. to 60 seconds
Apertures	f 1.4 to f 22
Film speeds	ISO 6 to 3,200

Order Code 4000



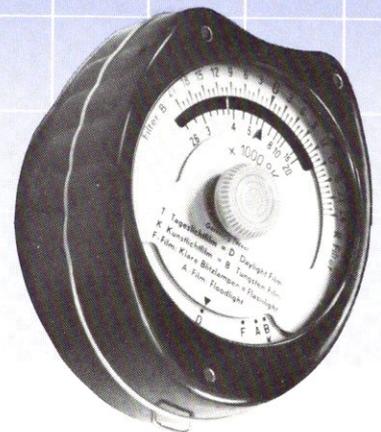
Pilot 2

You're starting right with the tiny Gossen Pilot 2 – the most compact meter made for accurate reflected- and incident-light measurement. There's even an optional accessory available to enable you to mount the Pilot 2 on the hot shoe of your camera. It weighs under 1 1/2 ozs., yet it's got everything you need for movie or still photography. Get crisp, sparkling black & white, better color shots with the Pilot 2. Quick and convenient operation with its large computer dial and large, clear scales. Perfect exposures are simple with the Pilot 2.

Technical Specifications

Photo cell	Selenium
Angle of coverage	52° horizontal, 48° vertical reflected, 180° incident
Sensitivity	32 to 32,000 footcandles 4 to 4,000 footlamberts +5 to +17EV at ISO 100
Power source	No battery needed
Dimensions	1 3/4" x 2 1/2" x 1 1/8"
Weight	Less than 1 1/2 oz.
Scale Ranges:	
Shutter speeds	1/1,000 sec. to 4 minutes
Apertures	f 1.4 to f 22
Film speeds	ISO 6 to 3,200

Order Code 4005



Sixticolor

Truly a necessity for the color perfectionist, this specialized instrument gives color photography a new dimension in fidelity. The Sixticolor is a professional color temperature meter and filter indicator that shows at a glance whether light is too warm (reddish), too cold (bluish) or right on the mark. Also, it indicates which, if any, filter you need for color-correction regardless of the film you use, in daylight or under tungsten (incandescent) illumination.

Technical Specifications

Color temperature range	2,600 to 20,000K
Dimensions	2 5/8" x 3" x 1 1/2"
Weight	7 3/4 ozs.

Order Code 4060



Ultra Spot

The only spotmeter with total information in the viewfinder.

With the Gossen Ultra Spot, evaluation of subject detail is faster and easier than ever. That's because the Ultra Spot presents all the information you need at a single glance. When you look through its viewfinder you can see the subject, a 1 measuring circle and a complete display of exposure information.

You never have to take your eyes off your subject and all controls are operated with a simple set of four buttons and a slide switch that sit right under your thumb.

The combination of electronic accuracy and a high-quality optical lens means the Ultra-Spot provides a vivid 15 view with a 1 circle in the middle to indicate the meter's measuring angle. The exposure information is displayed around the viewing field and includes: ambient light readings, f-stop, shutter speed, exposure value, zone or cine. In addition, you can average up to ten discrete readings.

For ambient light, flash and zone system photography.

The Gossen Ultra Spot is truly an all-purpose spotmeter that's equally adaptable to color or black & white film. It's engineered for both ambient and flash lighting—plus it's a natural for zone system photography. With its comfortable design, wealth of technically advanced features and fingertip operating ease, the Ultra Spot is a most comfortable and precise way to take all of your spot readings.

See the difference Ultra Spot makes.

Ultra Spot puts everything you need to control an exposure right in your hand. In color photography, you can reach new levels of creativity by controlling exposure and contrast like never before. And, in black & white photography, you'll find that Ultra Spot lets you use the complete spectrum between light and shade by allowing you to master even the most extreme light/dark contrasts.

The zone system simplified.

Developed by Ansel Adams as a synthesis of technology and intuition, zone system photography is a technique for ensuring that different tonal values of a subject can be reproduced as the desired value gradation. With the Ultra Spot's zone function, you can put this precise technique to work for you. In fact, Ultra Spot was specifically designed to help you easily explore the exciting possibilities in the zone system.

Ergonomic design plus operating ease.

Smart as it is, the Ultra Spot is remarkably easy to handle and operate. Its molded grip is comfortable for either right or left-handed users. The conveniently placed control panel can be operated with your thumb and you never have to take your eyes off the subject to use any of the controls. For added ease, Ultra Spot's memory stores all programmed settings as well as the latest readings, so they're available for instant retrieval—even after Auto Off.

Technical Specifications

Light sensor	Silicon blue cell
Reading processor	Microprocessor
Measuring ranges:	
Ambient light	EV 1 to EV 22 at ISO 100/21°
Flash	f 2.8 to f 45 at ISO 100/21°
Display ranges:	
Film speed	ISO 1/1° to ISO 80,000/50°
Apertures	f 1.0 to f 90 9/10
digital	in 1/10 stops
analog	in half stops
Shutter speeds	1/8,000 sec. to 60 min.. 1/90 sec. also provided
Cine for cinemas	8 to 64 frames/sec.
Other data:	
Zone system	0 to X; specially adapted to film development
Measuring angle	1°
Field of view	approx. 15°
Flash measuring times	1/1000, 1/5000, 1/250, 1/125, 1/90, 1/60, 1/30, 1/15 and 1/8 sec.
Averaging	Up to 10 discrete readings in ambient light mode
Exposure value correction	-9.9 to +9.9 stops
Extension factors	1 to 955
Duration of exposure reading display and illumination	15 seconds
Retains last exposure reading	Until deliberately cancelled
Retains all programmed settings	Until deliberately cancelled
Measuring distance	1 m to (shorter when using optional accessory lenses)
Battery/rechargeable battery unit	9 volt
Tripod socket	A 1/4
Dimensions	Approx. 90mm long with lens, 57mm wide, 190mm high with grip
Weight	Approx. 400 g (with battery)
Socket for attachment lenses or filters	M 43 x 0.75
Ocular adapter ..	HAMA (Order No. 339/04*)
Standard accessories	Case, carrying strap, battery, self-tack gray chart

* Available from reputable trade outlets.

Order Code 4050

Designed for use with the Ultra-Pro and Luna-Pro sbc, these electronic accessories will automatically program the meter response for easy, convenient direct reading.

Luna-Color.

The Ultra-Pro and Luna-Pro sbc become color-temperature meters with the addition of this accessory. The readout is in ° Kelvin and indicates which correction filters are needed for the color balance of the type of film you are using.

Order Code 4128



Profi-Select TTL.

Ambient light or flash measurements can be taken at the film plane of a view camera, automatically taking bellows factors and filters into account. An optional 4" x 5" cassette helps position the probe accurately.

Order Code 4130



Luna-Probe.

Extends the measuring application into hard-to-reach places. Ideal for macro-photography, view camera ground-glass measurements and even density measurements of negatives and transparencies using the meter's density function.

Order Code 4126

Multibeam.

A reflex-viewing spotmeter attachment with 1°, 5°, and 10° angles of acceptance. Single-lens reflex design permits measuring and viewing through the same lens – eliminating parallax problems. A built-in diopter correction allows you to adapt the unit to your own eyes.

Order Code 4122

Luna-Micro.

Adapts the meter to the ocular tubes of most microscopes for fast, precise, direct exposure determination.

Order Code 4124

Accessory Chart

	Ultra-Pro	Luna-Pro sbc	Luna-Pro F	Luna-Lux	Luna-Pro	Multi-Pro
Variable Angle Attachment	X	X	X	X	X	X
Enlarging Attachment	X	X	X	X	X	X
Repro/Copy Attachment	X	X	X	X	X	X
Microscope Attachment	X	X	X	X	X	X
Fiber Optics Probe	X	X	X	X	X	X
Luna-Color	X	X				
Profi-Select TTL	X	X				
Luna-Probe	X	X				
Multibeam	X	X				
Luna-Micro	X	X				
Luna-Sphere	X	X				
Luna Flash 2	X	X				

Luna-Sphere.

Enjoy the convenience of a hemispheric light collector that swivels 360° for photographic readings. Or use the interchangeable flat collector disc for precise photometric readings – the Ultra-Pro and Luna-Pro sbc become direct readout illuminance meters for lux, footcandles, lux seconds and footcandle seconds.

Order Code 4120

Luna-Flash for Luna-Pro sbc.

This easy-to-use attachment instantly converts the Luna-Pro sbc into a flash meter. For use only with the Luna-Pro sbc.

Order Code 4136



Gossen Accessories

Multi-Pro, Ultra-Pro, Luna-Pro sbc, Luna-Pro F, Luna-Lux and Luna-Pro system accessories.

This complete range of accessories expands the capabilities of your Gossen meters to meet every demanding application. They incorporate a spring-loaded latch that firmly locks the attachment to the meter. The accessories listed below are compatible with the Multi-Pro, Ultra-Pro, Luna-Pro sbc, Luna-Pro F, Luna-Pro and Luna-Lux.

Variable angle attachment.

For reflected light readings, the measuring angle of Gossen meters corresponds to a light acceptance angle of 30° . When using the Variable Angle Attachment this angle can be reduced to either 15° or 7.5° . The small measuring area permits accurate measurements for exposures with telephoto lenses and selective readings of various parts of the scene or subject when normal lenses are used.

When using the Variable Angle Attachment, the 7.5° and 15° areas being measured are visible through a marked reflex viewer with bright aerial imaging.

Order Code 4016



Microscope attachment.

The Microscope Attachment utilizes the meter's measuring sensitivity for convenience and reliable exposure measurement when taking photomicrographs. The Microscope Attachment fits the ocular tube of most microscopes for exact exposures determination and it's quite useful in measuring light intensity for fluorescent microscopy.

Order Code 4102

Repro (copying) attachment.

With the Repro Attachment on the meter, it is possible to obtain exposure value of flat copy such as paintings, documents and photographic prints.

The illumination on the copy board can be measured for evenness across various points of the material to be copied. This attachment can also be reversed for measurements of light transmitted through slides or other translucent material being copied.

Order Code 4108



Enlarging attachment.

The Enlarging Attachment will help eliminate guesswork in darkroom printing. It determines contrast range and correct exposure time by measuring the projected image on your enlarger easel. After calibrations for paper speed, direct readings of aperture and exposure time are possible, resulting in savings of time and material.

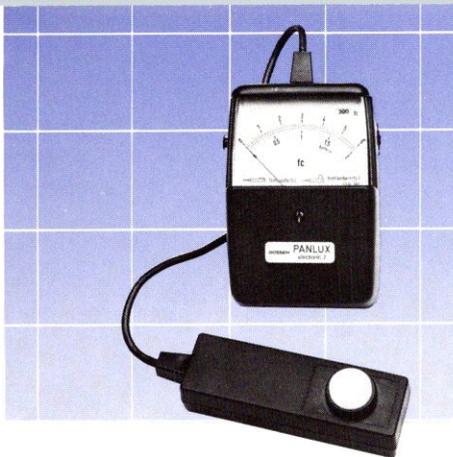
Order Code 4100

Fiber optics probe attachment.

With the flexible Fiber Optics Probe Attachment on the meter, measurements can be made in many areas which are usually inaccessible with an exposure meter. It is especially suitable for macro-photography, ground-glass measurements and for density measurements of negatives or transparencies.

Order Code 4101





Panlux Electronic 2 Footcandle Meter

Provides critical readings for the most extreme intensities – from blazing light to almost total darkness. With 9 measuring ranges, the Panlux can measure from .05 to 20,000 fc. Indispensable for applications as diverse as cinematography, highway lighting, work-area illumination and greenhouses, this ultra-sophisticated instrument is balanced to read daylight and any commonly used artificial light except pulsed light. "Cosine factor" problems common to footcandle meters have been eliminated by the unique design of the probe. Controls include a nine-range selector and battery test switch. An accessory luminance attachment can be purchased separately.

Technical Specifications

Measuring Ranges:

Footcandles 0.2/6/20/60/200/
600/2,000/6,000/20,000

Probe cable 5 feet
Instrument weight 12.3 oz.,
including battery and cord

Probe dimensions Length 4.2",
diffuser diameter .8"

Instrument dimensions 4.4" x
3.2" x 1.4"

Power source 9 volt battery

Order Code 4055



GKL 315 and 500F Cold Light Sources.

The ultimate lighting devices for micro and macro-photography. Three flexible lighting arms direct light to any point of the subject to allow overall lighting or spotlighting for special effects. The GKL 315's 150W halogen lamp can be continuously varied within a four-stop range while maintaining a constant 3200°K color temperature.

The GKL 500F features flash output via a gold-tone flash tube in addition to the continuous light source, to simplify micro and macro-photography with daylight films and isolate small moving objects.

Both units contain an automatic variable speed fan for cool operation and long life of the low-voltage quartz halogen lamp. Optional accessories include lighting control kits and a six-point ring light is also available for the 500F.

Technical Specifications

ORDER CODE	4065 GKL 315	4066 GKL 500F
Lamp	15 volt, 150 watt Halogen reflector lamp	12 volt, 100 watt halogen reflector lamp for continuous light. Gold-tone tube for flash.
Color temperature	3200°K	3200°K for continuous light, 5600°K flash.
Dimensions	6.5" x 3.4" x 7"	6.5" x 3.4" x 10.2"
Weight	7.5 Lbs.	8.75 Lbs.
Length of fiber optics		
Bundles	Approx. 24"	
Outer diameter	0.4"	
Active diameter	0.18"	
Power	120 VAC	
Fuse	2.5 AMP	

How did Gossen get so good?

Manufacturers of precision instruments since 1919, and one of the outstanding pioneers in exposure-meter design since 1932, Gossen continues to be the pre-eminent name in precision exposure meters.

But they've applied their broad-based knowledge of electrical and electronic measuring instruments in a variety of ways. In addition to photographic light meters, Gossen also produces metering instruments for industry and for servicing automobiles as well as power supplies, temperature controllers and electronic voltage regulators.

In today's mass-production-oriented society, there are still a few names that stand for craftsmanship and integrity. Gossen is one of them – and will continue to be in the years ahead.

Order Code	Gossen Exposure Meters	Price
4000	Gossen Scout 2	\$ 56.50
4005	Gossen Pilot 2	85.00
4010	Gossen N100	133.00
4015	Gossen Luna Lux	182.50
4020	Gossen Luna Pro	256.00
4025	Gossen Luna Pro sbc	294.00
4030	Gossen Luna Pro F	355.00
4035	Gossen Multi-Pro	471.00
4040	Gossen Ultra-Pro	883.00
4050	Gossen Ultra-Spot	630.00
4055	Gossen Panlux	529.00
4060	Gossen Sixticolor	406.00
4065	GKL 315 Halogen Light Source	1,065.00
4066	GKL 500F Electronic Flash/Halogen Light Source (Includes Sync Cord)	2,000.00

Note: The following accessories can be used with the Ultra-Pro, Multi-Pro, Luna Pro F, Luna Pro sbc, Luna Pro and Luna Lux.

Order Code	Gossen Accessories	Price
4100	Enlarging Attachment	62.50
4102	Microscope Attachment	58.50
4104	Fiber Optics Probe	295.00
4106	Variable Angle Attachment	84.00
4108	Repro/Copy Attachment	62.50

Note: The following accessories can be used with the Ultra-Pro and Luna Pro sbc.

4120	Luna Sphere Attachment	222.00
4122	Multibeam/Spot Attachment	525.00
4124	Luna Micro Attachment	72.00
4126	Luna Probe Attachment	358.00
4128	Luna Color Attachment	406.00
4130	Profi-Select TTL	1,090.00
4132	4 x 5 Cassette f/Profi-Select TTL	405.00

Note: The following accessory is used only with the Luna Probe sbc.

4136	Luna-Flash Attachment	360.00
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Note: The following accessories can be used with the Panlux 2 and GKL 315 and GKL 500F.

4140	Calculator for Panlux 2	38.00
4141	Luminance Attachment for Panlux 2	170.00
4142	Set of Focusing and Color Filters for GKL 315/500F	102.00
4143	Polarizing Filter Set for GKL 315/500F	50.00
4144	6 Point Ring Light for GKL 315/500F	680.00

Prices and specifications subject to change without notice.

bogen

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