

vivid

Surgical LED Lights



SIMPLE... COOL... CLEAR



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Riding on its patented light head module, vivid surgical lighting solutions make the surgical site clear like never before.

Simple, Cool, Clear light head has everything a surgeon has been yearning for in a light. These elegantly designed efficient light heads are yet again a proof of the superiority of functional German Technology.

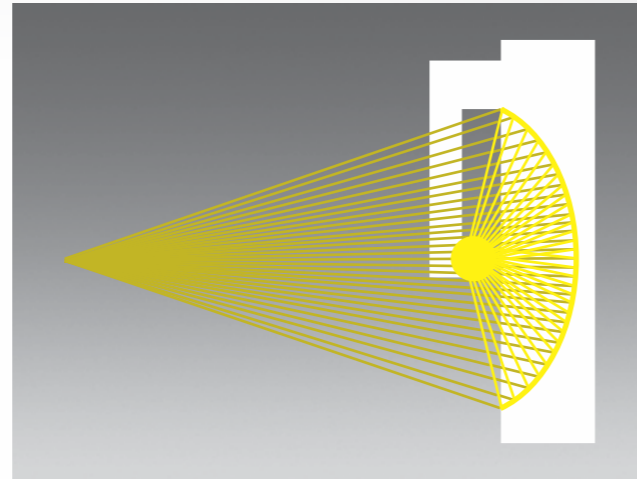
Reflection technique

Designated LEDs have individual reflectors designed with special algorithms. Thus the desired brightness of 160,000lux is delivered without compromising the performance.

95% of the intensity of the LED is used.

Low energy consumption of only 80VA is ensured.

Low heat generation, thus keeping the surgical environment cool.

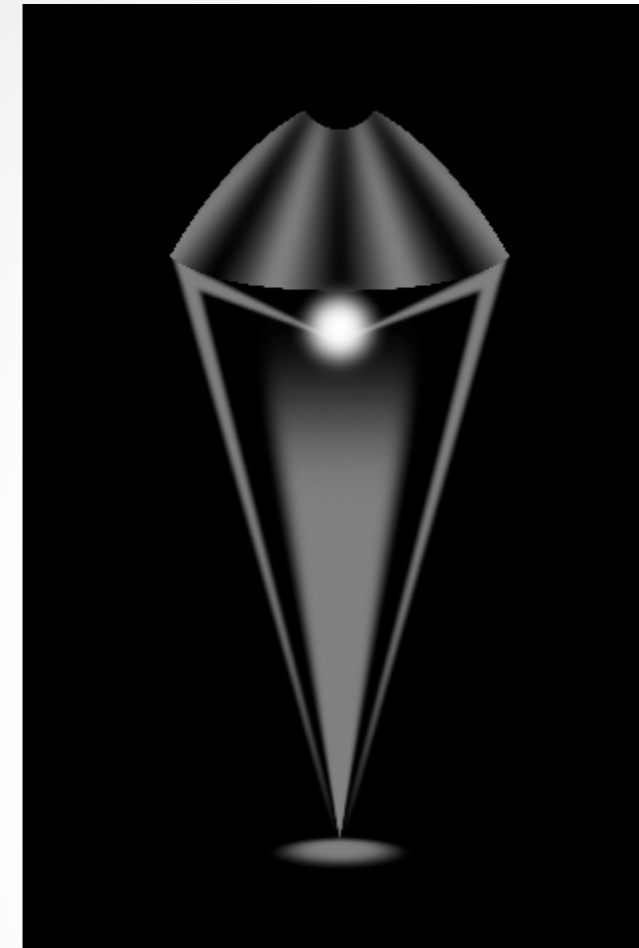


Arrangement technique

The distinctive arrangement of combined (Reflector and lens) LEDs in the vivid series of surgical lights highlights the competence of German Technology.



Benefits of combined technology



Reflection method

1. Increases the depth of illumination.
2. Achieves minimum operating field as small as 18cm
3. Reduces the chromatic aberration.
4. Optimised shadow free view.

Depth of focus

LEDs with reflectors contributes to the central stream of light. It delivers a highly concentrated beam of light and provides greater clarity and depth of illumination at the operating site.

Homogenous light

LEDs with special optical lenses optimizes the illumination and widens the luminous flux to the desired size of the surgical field. This special arrangement of diodes (Reflector and lens) enable a wide variation in the field of view (18cm – 35cm) making vivid a versatile source of illumination catering to all surgical procedures, Minor – MIS – Major surgeries.



Lens method

1. Makes the operating field wider up to 35cm.
2. Makes an homogenous operating field.



Light Head – smallest & brightest

Light weight and compact size of 65cm in diameter, makes this an effective light head. The operative function of the light becomes an easy task. This sleek and supple light head delivers a maximum illumination of 160,000 lux with 70 LEDs.



Endo mode

Vivid illuminates the OR field with the 5% of maximum intensity in Endomode to operate in dark room.



Compatible light head

The numerous provisions and the flat construction of this uniquely designed light head, makes light compatible to LAMINAR FLOW OR.

Equipped with special mechanism to suit LOW CEILING ORs without limiting Arm and Dome rotation.



Control system (electronic)

The illumination intensity and focus are controlled electronically at the light head in 10 steps & 3 steps respectively



Optimized shadow free view

The brilliant structure of the light head achieves 71% of intensity with one mask. The spread of 70 LEDs and its associated reflectors and lenses deliver an optimized shadow free view.



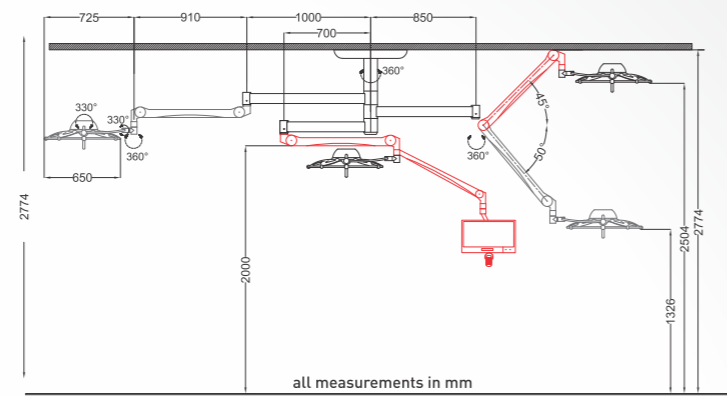
Wall control (optional)

The compact 12" wall control, controls light on / off, intensity & focus adjustment

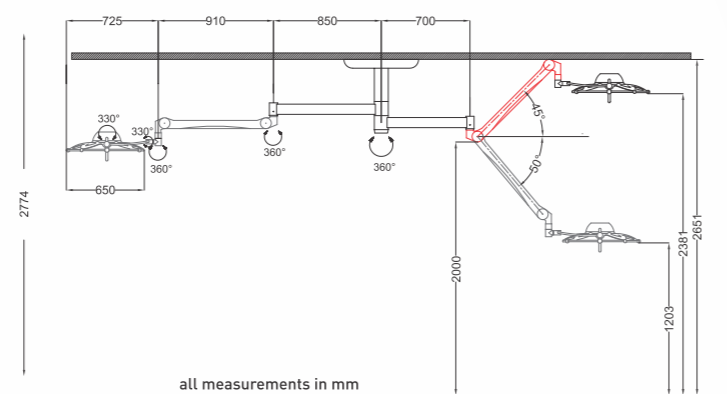
Low ceiling solutions

Mechanically adapted for low ceiling OR without compromising on arm or light head movements.

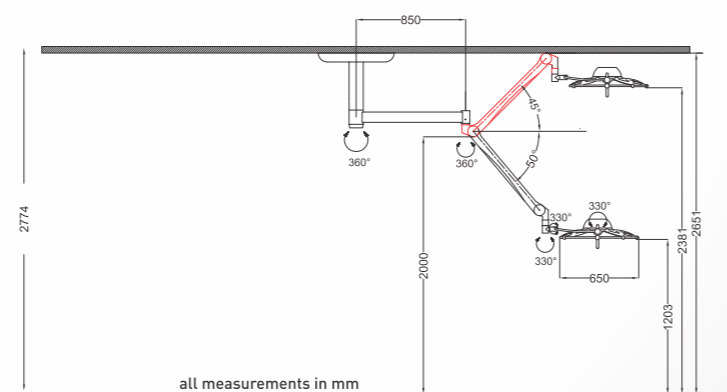
Triple light head or
Dual light head with
third monitor arm



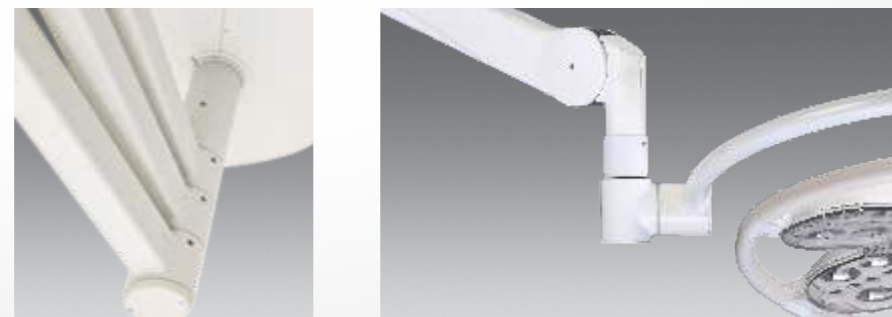
Dual light head



Single light head



Suspension arm 360 deg
rotatable and special
mechanism - Low ceiling

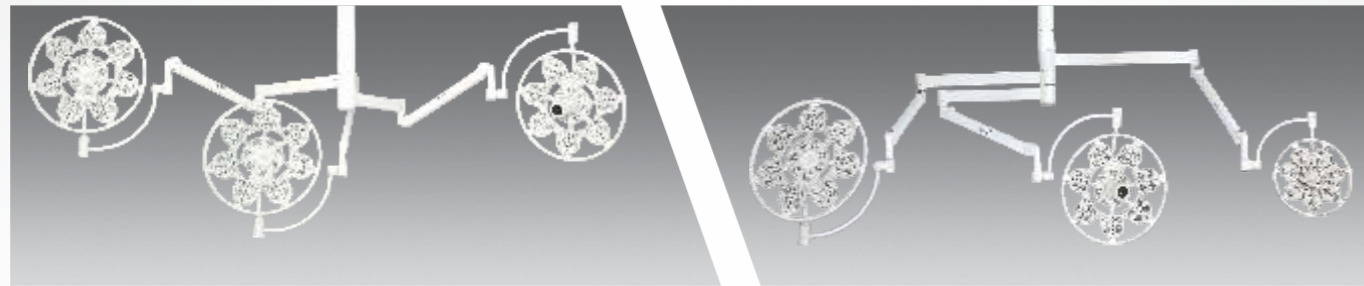


Technical parameters

	vivid 50W wall vivid 50F floor	vivid 100 ceiling vivid 100W wall vivid 100F floor	vivid 160 ceiling
Maximum illumination intensity	50,000 lx	120,000 lx	160,000 lx
Color temperature	4500 K	4500 K	4500 K
Color rendering index	95 Ra	95 Ra	95 Ra
Operating field diameter	14 cm	15 - 30 cm	18 - 35 cm
Focus	Fixed	Adjustable	Adjustable
Working Distance	70 - 140 cm	70 - 140 cm	70 - 140 cm
Depth Of Illumination L1+L2 at 20%		1400 mm	980 mm
Depth Of Illumination L1+L2 at 60%		670 mm	467 mm
Illumination Control	30 - 100 %	5 - 100 %	5 - 100 %
Number of LEDs	7	42	70
Lifetime Of LEDs	50,000 hrs	50,000 hrs	50,000 hrs
Total radiant power at max. light intensity	150 W/m ²	300 W/m ²	544 W/m ²
Radiant energy	3.3 mW/m ² lx	3.3 mW/m ² lx	3.3 mW/m ² lx
With One Mask			71%
With Two Masks	50%	47%	48%
At Bottom of Standard Tube(Inside)	98%	97%	77%
At Bottom Of Standard Tube With One Mask			49%
At Bottom Of Standard Tube With Two Masks	40%	46%	37%
Light Head Diameter	24 cm	44 cm	65 cm
Height Adjustment Of light Head	1145 mm	1178 mm	1178 mm
Weight Of a Light Head	1 kg	4.5 kg	10kg
Input Voltage	110/220 ± 10%	110/220 ± 10%	110/220 ± 10%
Wattage	10 VA	24 VA	80 VA

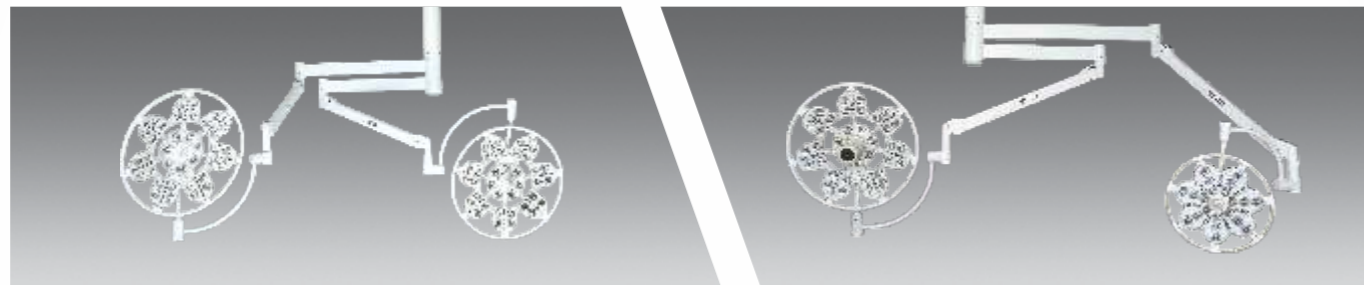
Model combinations

vivid has wide range of configuration meeting the surgeon requirements



Triple light head - vivid 160 / 160 / 160
(1,60,000 + 1,60,000 + 1,60,000 Lux)

Triple light head - vivid 160 / 160 / 100
(1,60,000 + 1,60,000 + 1,20,000 Lux)



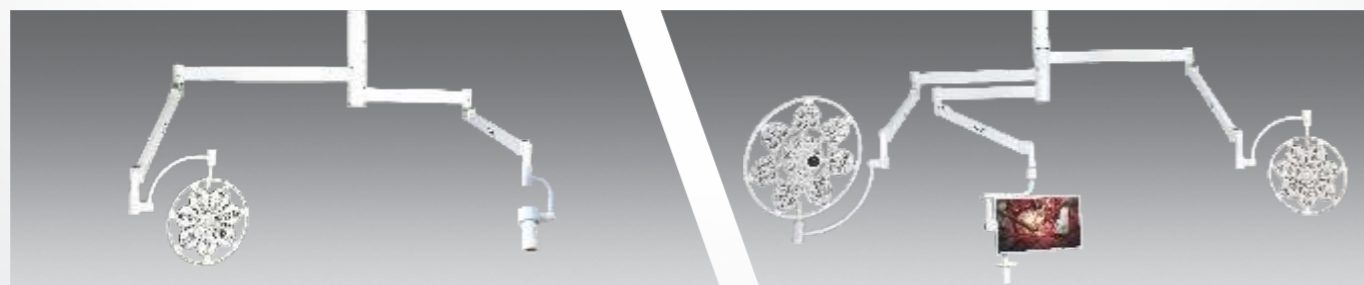
Dual light head - vivid 160 / 160
(1,60,000 + 1,60,000 Lux)

Dual light head - vivid 160 / 100
(1,60,000 + 1,20,000 Lux)



Dual light head 100 / 100
(1,20,000 + 1,20,000 Lux)

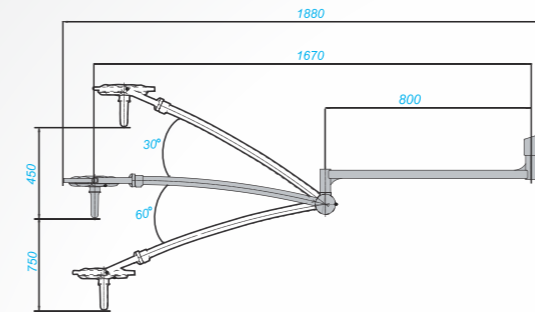
Single light head 160
(1,60,000 Lux)



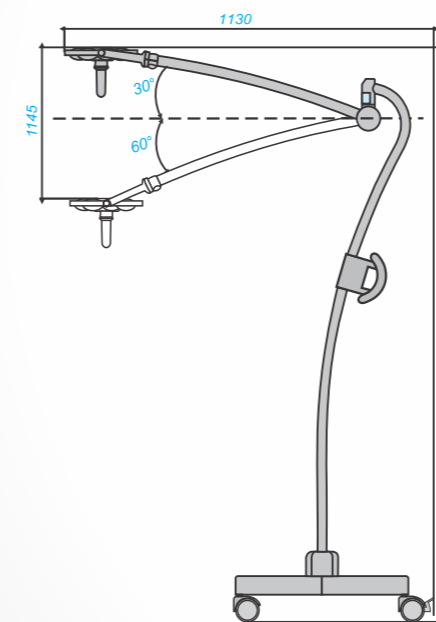
vivid 100 / Camera Arm
(1,20,000 Lux)

Dual light head with Monitor Arm
(1,60,000 + 1,20,000 Lux + Monitor Arm)

Minor OR lights



vivid 50 W wall mounted
Maximum Lux: 50,000



vivid 50 F
Maximum Lux: 50,000



vivid 100F
Maximum Lux: 1,20,000
Rechargeable battery (5 hours)
without external resource (optional)



vivid 100 Ceiling mounted (swing arm)
Maximum Lux: 1,20,000

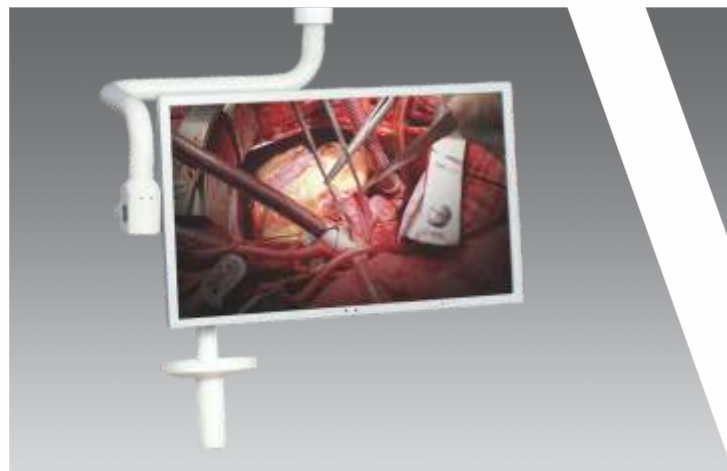
vivid CAM



Camera on light head



Camera arm



Monitor



Camera control unit

vivid cam

Plug and play camera

Full HD (High-Definition) 1080i / 50 Standard

Can be commonly used and shifted among the OTs

vivid cam HD camera specifications

Video Standard	Full HD 1080i
Effective Number of Pixels	2 Mega Pixels
Resolution	1080i/50
Aspect Ratio	16 : 9
Minimum object distance	10-800 mm
Electronic Shutter	1/1 to 1/10,000 s
Signal to Noise Ratio	More than 50 dB
Focus	Automatic/Manual
Zoom	12 x (120x with Optical Zoom)
AE Mode	Automatic/Manual
Freeze function	Available
Image Rotation	Possible, Mechanical Rotation
White balance	Automatic/Manual
Video Output	HDMI- 1 No & HD-SDI – 2 Nos
Camera Control unit dimensions	300 x 200 x 75 mm (L x W x H)
Input Voltage for Camera Control Unit	230 VAC/50 Hz