



bluephase® G2



Every material, every indication, every time.

First in an entirely new class of LED curing lights, the bluephase G2 provides unlimited curing capabilities and unlimited use making it the most advanced curing light ever produced. Extraordinary technology provides Extraordinary results. Take your practice into the next generation of LED curing technology with the bluephase G2.

Every material

The ability to polymerize all dental materials depends on the light emitted. To date, conventional LED lights have not been suitable for universal use due to the narrow emission spectrum. Like halogen lights, the innovative bluephase G2 achieves a broad light spectrum of 380-515 nm. With Ivoclar Vivadent's new *Polywave*** *LED technology*, the bluephase G2 light is capable of curing all materials.*

Lucirin TPO Camphorquinone Halogen bluephase with polywave LED Conventional LED

Every indication

Unlike many cordless LED lights, the bluephase G2 can be used to cure extensive multi-unit restorations without shutting down to cool. Due to the virtually noiseless built-in fan, bluephase G2 assures extended periods of operation without clinical compromise.



Every time

A cordless design based on state-of-the-art lithium polymer batteries offers the ultimate in mobility. The innovative Click & Cure function allows the handpiece to be connected with the power cord of the charging base to enable continuous operation should the battery be exhausted.





Every material, every indication, every time.



Proof of Performance

The optional bluephase radiometer is the first of its kind. A built-in, intelligent light sensor takes into account the true radiating surface of the light probe making it possible to determine the actual light intensity of LED curing lights. For the first time, the light intensity of LED curing lights can be accurately measured using a radiometer.



Intense Curing

The high-level light intensity of the bluephase G2 provides a deeper depth of cure in the shortest possible curing time. Composites and adhesives can be cured in just 10 seconds, regardless of shade. Complete polymerization of luting composites is also achieved faster and more efficiently when cementing indirect restorations.



Source: R&D Ivoclar Vivadent AG, Schaan, 2007

Competence in Composites®

The main objective of polymerization is to achieve adequate curing of the material. According to the Total Energy Concept, an energy dose of 16,000 mWs/cm² is required for composite materials. Therefore, curing time and intensity of the polymerization light play a decisive role in the placement of long-lasting restorations.

Total Energy Concept				
Dose (mWs/cm ²)	16,000	16,000	16,000	
Light intensity (mW/cm ²)	400	800	1,600	
Curing time (s)	40	20	10	
		Source: P. Koran, R.	Kürschner, 1998	

Ordinary is now extraordinary!



The LED revolution

LEDs have revolutionized light curing and are responsible for the success of cordless polymerization in the dental practice. For the first time ever, it has become possible to overcome the existing and well-documented limitations of emerging LED technology. Developed for unlimited operation, the bluephase G2 is suitable for every material and for every clinical situation imaginable.

	Every material (380 - 515 nm)	Every indication (continuous use of at least 10 minutes	Every time (optional corded operation)
bluephase G2			1
L.E.Demetron II	=	1	=
Demi		✓	-
SmartLite IQ2			=
SmartLite PS	<u>=</u>	725	
Elipar FreeLight 2			

Consistency in construction

In order to achieve fast curing times, the bluephase G2 generates an impressive light intensity of 1,200 mW/cm2. In order to ensure consistent, high-quality clinical performance the intensity of every bluephase G2 curing light has been set to a tightly specified tolerance of just \pm 10 %. Conventional LED units can exhibit extreme performance fluctuations which may lead to inadequate material polymerization.

Field test on light intensity (mW/cm²) Units with an intensi-				
	Supplier's specifications	Measured mean value	ty < 70 % than stat-	
bluephase	1,100 (± 10 %)	1,066	0 %	
	1,000		67 %	
SmartLite PS	950	927	0 %	
Elipar FreeLight 2	1,000		58 %	

Source: C.-P. Ernst, Johannes Gutenberg University Mainz, 2006

One-Step curing

The rotating 10 mm light probe provides excellent accessibility to all areas of the oral cavity. Even large restorations can be entirely irradiated due to the large diameter of the light probe. With the bluephase G2, multiple polymerization cycles for MOD restorations are a thing of the past.



Light where you need it

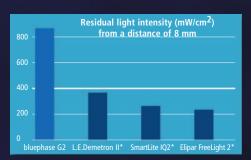
The straight 10mm probe of the bluephase G2 provides ideal light focusing characteristics. Turbo (booster) probes tend to scatter the light which significantly reduces the concentration of light on a restoration. The scattering effect is amplified in lights using no probe.



Pen style light (LED at lens)

Excellent Polymerization

Specially designed optics cause the intense light of the bluephase G2 to penetrate deep into the material to be polymerized. Even when it is not possible to place the tip of the light probe directly over the material – for example in the proximal box – the bluephase G2 will achieve excellent polymerization.



Source: R. Price, Dalhouisie University Halifax, 2007



Delivery Forms & Technical Data

Delivery Forms	Order No.	Contents
bluephase 100 - 240 V	607920	Handpiece, charging base, power pack, battery, 10 mm light probe, anti-glare cones
bluephase 100 - 240 V and bluephase meter	607921	Handpiece, charging base, power pack, battery, 10 mm light probe, anti-glare cones, radiometer, 3 batteries
Accessories	Order No.	Contents
bluephase meter	607922	Radiometer, 3 batteries
bluephase meter bluephase handpiece	607922 608532	Radiometer, 3 batteries Handpiece, battery, 10 mm light probe
bluephase handpiece	608532	Handpiece, battery, 10 mm light probe
bluephase handpiece bluephase battery	608532 608535	Handpiece, battery, 10 mm light probe
bluephase handpiece bluephase battery Light probe 10 mm, black Light probe pin-point	608532 608535 608537	Handpiece, battery, 10 mm light probe 1 piece 1 piece
bluephase handpiece bluephase battery Light probe 10 mm, black Light probe pin-point 6/2 mm, black	608532 608535 608537 608538	Handpiece, battery, 10 mm light probe 1 piece 1 piece 1 piece

Technical Data	
Wavelength range	380 -515 nm
Light intensity	1,200 mW/cm ² ± 10%
Curing modes	
1,200 mW/cm ²	High Power
1.200 mW/cm ² 650 mW/cm ² t	Soft Start
650 mW/cm ²	Low Power
Power supply	Lithium polymer battery approx. 60 min. capacity (curing time); approx. 2 h charging time
Operating voltage	100 -240 VAC / 50 - 60 Hz
Warranty	3 years (battery 1 year)





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