



# LED for every use

bluephase<sup>®</sup> C8 800 mW/cm<sup>2</sup> bluephase<sup>®</sup> style 1,100 mW/cm<sup>2</sup> bluephase<sup>®</sup> 20i 2,000 mW/cm<sup>2</sup>









## **bluephase**° with the licence to cure

True innovation proves itself in use. A perfect example of this is the bluephase curing light with the specially developed polywave® LED technology. bluephase sets new standards in every respect. It is not only the best-selling LED polymerization light in Europe, but it is also frequently used in clinical and scientific studies<sup>1</sup> and has been ranked top light-curing unit by independent and renowned test institutes<sup>2</sup>. The latest family member, bluephase style, is based on proven technology and embodies new improvements. Whilst offering a performance comparable to that of the existing bluephase light, the new **bluephase style** features a compact and ergonomic shape that **fits the hands of women and men** even more comfortably.



In contrast to LED devices of the second generation, the polywave® LED lights achieve an optimal broadband range from 385 to 515 nm, which is similar to the spectrum of halogen lights, which served as their model. The bluephase curing lights are therefore capable of polymerizing all current photoinitiators and materials used in dentistry.





#### bluephase style can be held like a pen or a pistol.

#### Every material due to polywave® LED

bluephase is suitable for all light-curing materials because it is based on polywave LED technology, which uses different LEDs with dominant wavelengths of approx. 410 nm and 470 nm.



Source: R. Price, Dalhouse University Halifax, 2011

## Every indication due to continuous cooling

Annoying interruptions and irritating waiting times are a thing of the past. The lights of the bluephase range allow continuous operation without any clinical limitations - even when extensive indirect restorations are placed.

### Every time due to Click & Cure

Cordless operation ensures maximum mobility in the dental practice. The proven Click & Cure function enables you to avoid irritating waiting times in case the battery has run out. With just one click you can connect the handpiece to the power cord of the charging base.

## Every hand – comfortable to hold for men and women

You can hold bluephase style like a pen or like a pistol. The strain exerted on your arm and hand is very low - regardless of the size of your hand.

\* These trade names are not registered trademarks of Ivoclar Vivadent AG.

 $^{1}$  LED light of the  $2^{nd}$  generation  $^{2}$  LED light of the  $3^{rd}$  generation

## **bluephase**<sup>®</sup> **style** – on an ergonomic mission

NEW

The battery-operated **bluephase style** offers a light intensity of **1,100 mW/cm<sup>2</sup>** and has been designed to be ergonomic down to every detail. Given the compact shape and balanced weight distribution, this curing light suits the hands of women and men equally well.

A particularly handy feature of bluephase style is the light probe. Because it is shorter than that of other known lights, all tooth surfaces can be







The 10-mm light probe allows MOD fillings to be irradiated only once, saving valuable time.

#### bluephase style



Competitive light

Even difficult-to-reach areas can be easily accessed. (Dr Eduardo Mahn, Saudi Arabia) comfortably reached with no need for patients to keep their mouth wide open. Due to the large 10-mm diameter, the light is capable of covering even large cavities, eliminating the need for timeconsuming multiple curing cycles. This is particularly advantageous in conjunction with e.g. Tetric EvoCeram<sup>®</sup> Bulk Fill restorations, where 4-mm increments can be polymerized in as little as ten seconds.

# Curing depths of Tetric EvoCeram (in mm)



Curing time with bluephase style: 10 s; curing time with other lights: according to the manufacturers' directions.

Source: R&D Ivoclar Vivadent Schaan, 2010

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# **bluephase**<sup>°</sup> **20i** – on a maximum mission

The battery-operated **bluephase 20i** combines the maximum light intensity of **2,000 mW/cm<sup>2</sup>** in the **turbo program** with extremely short curing times of **5 seconds** for light and dark composites while being gentle to the pulp and the soft tissue.

The full capacity of bluephase 20i is particularly useful when consistent maximum performance is required, for instance when placing all-ceramic restorations or bonding orthodontic brackets. Because every aspect of the restoration can be polymerized in 5 seconds each and the curing light is equipped with an integrated fan for continuous cooling, adhesively cemented IPS Empress® and IPS e.max® restorations can be placed in no time at all.



Four easy-to-use programs: Turbo for maximum performance, High Power for rapid curing, Low Power for curing areas near the pulp and Soft Start for stress-reduced polymerization.



The high light intensity allows polymerization in the shortest possible time in every clinical situation.



# **bluephase**<sup>®</sup> **C8** – on an economical mission

As a mains-operated LED curing light with a light intensity of **800 mW/cm<sup>2</sup>**, **bluephase C8** allows time-saving short curing times. Additionally, bluephase offers excellent value for money due to the low purchase costs. Given the excellent light scattering characteristics of the parallel-walled 10-mm light probe, even deep proximal boxes can easily be cured.



Three easy-to-use programs: High Power for rapid curing, Low Power for curing areas near the pulp and Soft Start for stress-reduced polymerization.

## Field test on light intensity (mW/cm<sup>2</sup>)

	Value indi- cated by the manufacturer	Mean value measured	Curing lights showing an intensity of <70% of the value indicated by the manufacturer
bluephase (predecessor model)	1,100 (± 10 %)	1,066	0 %
L.E.Demetron I*	1,000	699	67 %
Translux PowerBl	ue* 1,000	513	100 %
Elipar FreeLight 2*	1,000	602	58 %

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

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In this field study, the light output of 660 curing lights used in dental practices was tested. A particular feature of the test was that the light intensity was measured using the integrating sphere, which determines the absolute light intensity with high precision.



# **bluephase**° Technical data at a glance

		<b>A</b>	NIE		<u></u>
		bluephase <sup>®</sup> C8	bluephase <sup>®</sup> style	bluephase <sup>®</sup> 20i	bluephase <sup>®</sup> meter
Technical data		800 mW/cm <sup>2</sup> ±10 %	1,100 mW/cm <sup>2</sup> ±10 %	2,000 mW/cm <sup>2</sup> - 2,200 mW/cm <sup>2</sup> LED Class 2	300 – 2,500 mW/cm² ± 20 %
	Every hand (ergonomic design)	_	$\checkmark$	_	1
	Every material (wavelength range)	✓ 385−515 nm	✓ 385−515 nm	✓ 385−515 nm	✓ 385−515 nm
	Every indication (continuous operation for at least 10 min)	1	1	1	
	Every time Click & Cure (optional mains operation)	(mains operation)	1	<b>√</b>	
	Curing time for selected composite materials 2 mm Tetric EvoCeram/IPS Empress Direct 4 mm Tetric EvoCeram Bulk Fill	15 sec	10 sec	5 sec	Moscuring the light
	Curing programs			2,000 mW/m²	intensity of LED curing lights
	HIGH Power	— 800 mW/cm <sup>2</sup>	— 1,100 mW/cm <sup>2</sup>	1,200 mW/cm <sup>2</sup>	
	LOW Power	650 mW/cm <sup>2</sup>	-	650 mW/cm <sup>2</sup>	
	SOFT Start	650/800 mW/cm <sup>2</sup>	_	650/1,200 mW/cm <sup>2</sup>	
	Light probe	10 mm, black	Shortened, 10 mm, black	10 > 8 mm, black	
	Power supply	Mains operation (upgrade to battery operation possible)	Lithium-polymer battery, capacity: approx. 20 min/ charging time approx. 2 h	Lithium-polymer battery, capacity: approx. 45 min/ charging time approx. 2 h	3 x LR6 AA 1.5 VDC
	Warranty	3 years	3 years (battery 1 year)	3 years (battery 1 year)	3 years

## **bluephase**° Delivery forms and accessories at a glance





			bluephase <sup>®</sup> C8	bluephase <sup>®</sup> style	bluephase <sup>®</sup> 20i
	100–240 V		613 736	635 153	613 735
-	100–240 V & bluephase meter		613 751	635 154	613 752
	bluephase meter	607 922			
	10-mm light probe, black	636 240	_		_
ms	10-mm light probe, black	608 537		_	_
Accessories / delivery tor	10 > 8-mm light probe, black	627 389	-	_	
	6 > 2-mm (Pin-Point), black	636 241	-	1	_
	6 > 2-mm (Pin-Point), black	608 538	$\checkmark$	_	✓
	Protective sleeves	636 239	-		-
	Protective sleeves	608 554	$\checkmark$	_	•
	Anti-glare cone	551 756		-	
	Anti-glare shield	592 496	$\checkmark$	1	
	Battery		-	637 692	627 300
	Handpiece		_	637 916 (handpiece, battery, light probe 10 mm)	613 753 (handpiece, battery, light probe 10 > 8 mm)

 $\blacksquare$  included in delivery form  $\checkmark$  available as accessory

## Every material, every indication, every time - and now for every hand

Only this unique combination gives you the licence to cure.



These products form part of our "Composites" competence area. All the products of this area are optimally coordinated with each other.

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