

# bluephase<sup>®</sup> 20i

Licence to cure



new  
LED for every use

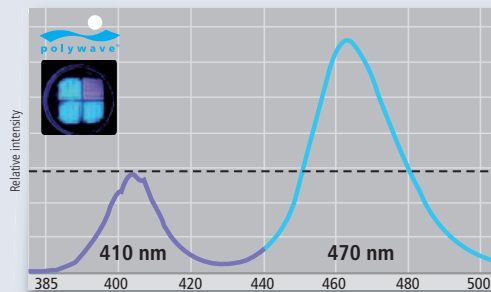


# bluephase® – The next generation in light-curing

## Every material due to polywave® LED

With its specially developed **polywave LED**, the 2<sup>nd</sup> generation of the bluephase family sets new standards in the dental practice.

In contrast to conventional LED devices, the new polywave LED achieves an optimal broadband range from 385 to 515 nm, which is similar to the spectrum of halogen lights that served as its model. The new polywave LED light is therefore suitable for all photoinitiators.



### Every material due to polywave LED

Due to the two different LEDs that are used – one with approx. 410 nm and the other approx. 470 dominant wavelength – bluephase is suitable for all light-curing materials.

## Every indication due to continuous cooling

As opposed to annoying interruptions and irritating waiting times, the invisible and virtually noiseless fan of the bluephase light allows continuous operation without any clinical limitations – even extensive restorations can be placed without interruptions.



## Every time due to Click & Cure

The proven **Click & Cure** function enables users to avoid irritating waiting times if the battery has run out. The handpiece can be connected to the power cord of the charging base with just one click.



This is how it works: Turn around charging base; remove power cord; attach to handpiece; resume work as usual



# bluephase® 20i – on a maximum mission



## The dental experts agree:



I expect a polymerization light to fulfil the following requirements: reliable and constant light intensity, short curing times, sufficient battery capacity and the corresponding cooling system. bluephase combines all these



positive features in one product.

Dr A. Kurbad, Germany



## bluephase 20i ...

The battery-operated bluephase 20i combines the highest light intensity of **2,000 mW/cm<sup>2</sup> in the Turbo program** with extremely short curing times of no more than **5 seconds** for light and dark composites while being gentle to the pulp and the soft tissue.



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.

## ... on a maximum mission

The full capacity of bluephase 20i is particularly useful when consistent and maximum performance is required, for instance when all-ceramic restorations are placed or orthodontic brackets are bonded.

Due to the polymerization of every aspect for 5 seconds each and the integrated fan for continuous cooling, adhesively cemented IPS Empress® and IPS e.max® restorations are polymerized in no time.



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

## Everything from the same manufacturer

Ivoclar Vivadent provides the best prerequisites for durable aesthetic composite restorations and adhesively cemented all-ceramic restorations by offering optimally coordinated products and outstanding precision in terms of light intensity. This is also supported by a field study conducted at the Johannes Gutenberg University.

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





	Value indicated by manufacturers	Mean value measured	Units with an intensity of < 70 % of the value stated by manufacturer
bluephase (previous model)	1,100 (± 10 %)	1,066	0 %
L.E.Demetron I*	1,000	699	67 %
Translux Power Blue*	1,000	513	100 %
EliPAR FreeLight 2*	1,000	602	58 %

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

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In this field study, the light output of 660 curing lights that are used in dental practices were 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® 20i – Technical data at a glance

Technical data	new		
	bluephase® 20i 2,000 mW/cm <sup>2</sup> - 2,200 mW/cm <sup>2</sup> LED Class 2	bluephase® 1,200 mW/cm <sup>2</sup> ±10%	bluephase® meter 300 - 2,500 mW/cm <sup>2</sup> ±20%
Every material (wavelength range)	✓ 385 - 515 nm	✓ 385 - 515 nm	✓ 385 - 515 nm
Every indication (continuous operation for at least 10 min)	✓	✓	
Every time Click & Cure (optional mains operation)	✓	✓	
Curing time for composites	10 sec	15 sec	
Curing time for Tetric EvoCeram/IPS Empress Direct	5 sec	10 sec	
Curing programs			Measuring the light intensity of LED curing lights
TURBO 	2,000 mW/cm <sup>2</sup>	—	
HIGH Power 	1,200 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 / 1,200 mW/cm <sup>2</sup>	650 / 1,200 mW/cm <sup>2</sup>	
Light probe	10>8 mm black	10 mm black	
Power supply	Lithium-polymer battery capacity: approx. 45 min/ charging time: approx. 2h	Lithium-polymer battery capacity: approx. 60 min/ charging time: approx. 2h	3 x LR6 AA 1.5 VDC
Display	OLED colour display	OLED colour display	Digital LCD display
Warranty	3 years (battery 1 year)	3 years (battery 1 year)	3 years

## Accessories / delivery forms

100 - 240V	613 735	607 920
100 - 240V & bluephase meter	613 752	607 921
10 mm light probe, black	608 537	■
10>8 mm light probe, black	627 389	■
6>2 mm (Pin-Point), black	608 538	✓
Protective sleeves	608 554	■
Anti-glare cone	551 756	■
Anti-glare shield	592 496	■
Battery	627 300	608 535
Handpiece	613 753 (handpiece, battery, light probe 10>8 mm)	608 532 (handpiece, battery, light probe 10 mm)



	bluephase® 20i	bluephase®
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100 - 240V & bluephase meter	613 752	607 921
10 mm light probe, black	608 537	■
10>8 mm light probe, black	627 389	■
6>2 mm (Pin-Point), black	608 538	✓
Protective sleeves	608 554	■
Anti-glare cone	551 756	■
Anti-glare shield	592 496	■
Battery	627 300	608 535
Handpiece	613 753 (handpiece, battery, light probe 10>8 mm)	608 532 (handpiece, battery, light probe 10 mm)

■ Included in delivery form ✓ Available as accessory

## bluephase meter – Licence to measure intensity

The innovative radiometer with a unique measuring principle is used to determine the light intensity of LED curing lights with a circular light-emission window.



Article no.: 607 922