



## Education solutions

A more engaging way to learn



We know you need reliable equipment that is easy to set up to help teach more effectively.

This is where Optoma comes in. Our education range provides cost effective, high quality products to bring learning to life. From small classrooms to large auditoriums, this guide will highlight how all aspects of the education environment can benefit from Optoma's technology solutions.

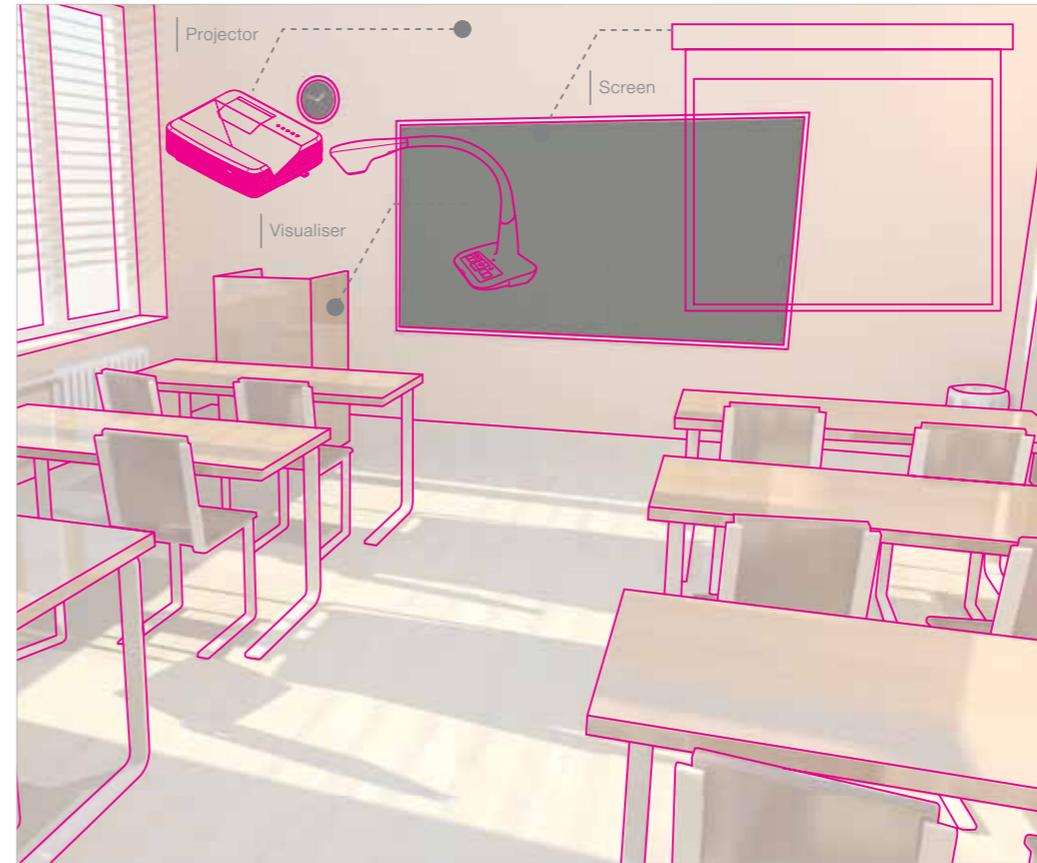


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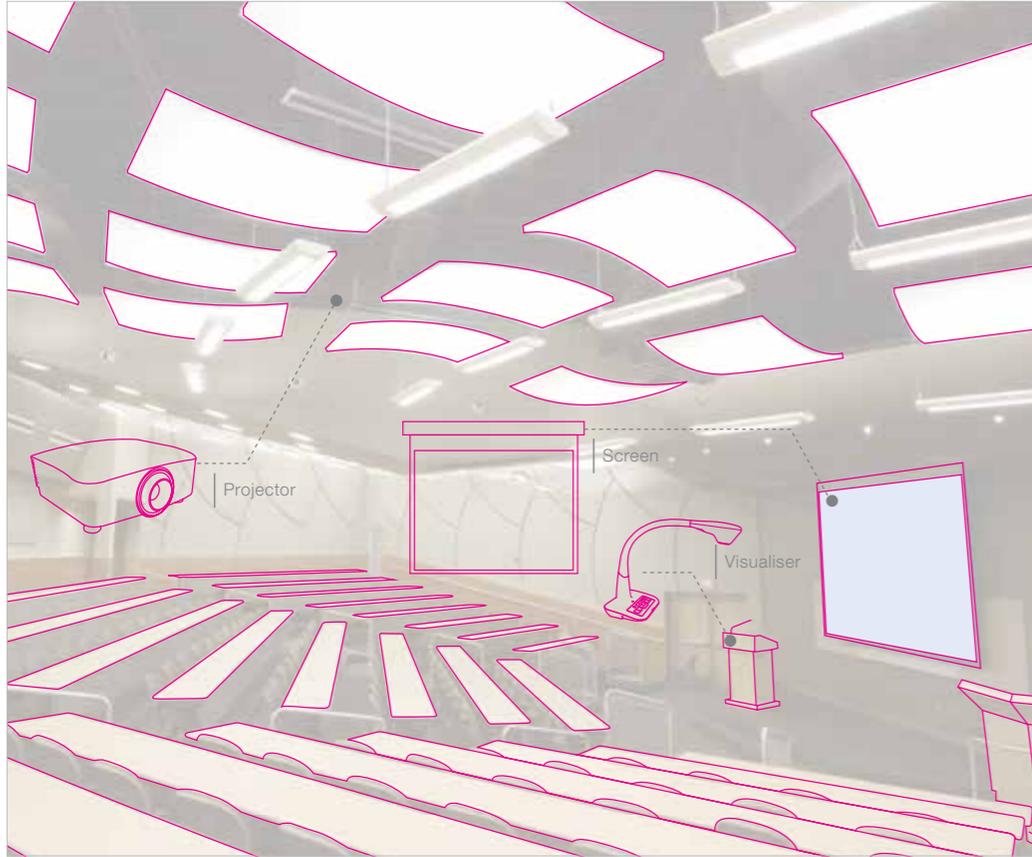
[www.optoma.com](http://www.optoma.com)

## Teaching tools to inspire



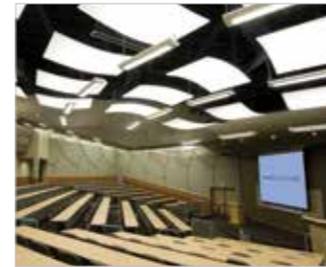
**Classroom and science lab**  
There is no better place than the classroom to involve students. Use an interactive projector to inspire multiple students and a visualiser to share even the smallest objects, passages of text or detailed experiments. Perfect to show science experiments the whole class can see.





### Lecture theatre

A lecture theatre should be fully equipped with the latest presentation products - a powerful projector is essential for a bright, crystal clear picture the whole audience can see.



### School hall

A school hall can be used for so much more than just school assemblies. The latest projection equipment enables the full potential of the hall to be realised. Optoma's laser projectors are perfect for those high ceilings as they are bright (6,000+ lumens) and need very little maintenance. See our ProScene range for more information.

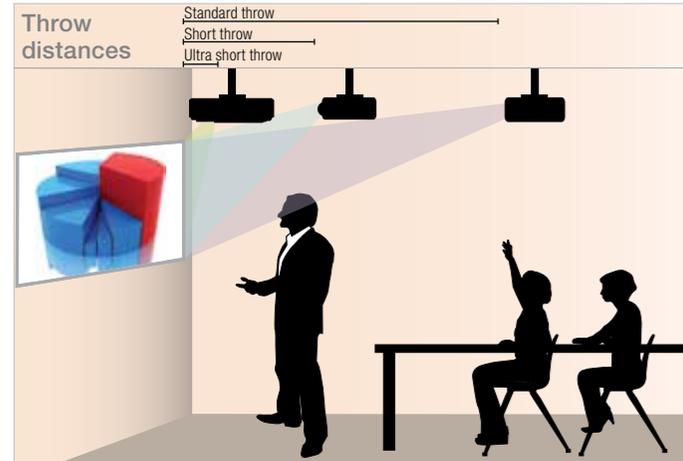


## Space saving solutions

Shadows and screen glare are a thing of the past with the Optoma range of short and ultra-short throw projectors. Educators can now stand and teach close to the screen.

### Easy to install

These projectors can display a 100" image (diagonal) from as little as 55cm from the screen.



### Shadow-free

Teach without interruption from shadows as the projector is positioned close to the screen.



## Interactive learning

Teaching becomes a fun and exciting experience with the interactive ultra-short throw projector.

Turn any surface into an engaging collaborative 3D interactive workspace, up to 140", without the need for a screen. Optoma has a great range of interactive and non-interactive projectors in XGA, WXGA, 1080p and WUXGA resolutions.



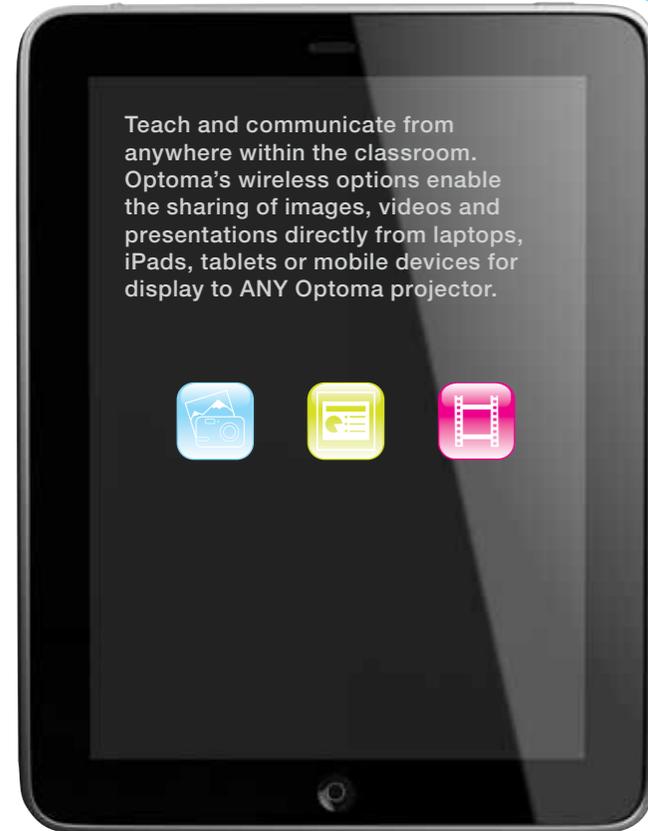
### Ultra wide: more students working together

Optoma's lamp-less, super-wide, ultra short throw interactive projector is the equivalent of having two 4:3 images displayed side-by-side and allows even more students to work collaboratively at the screen.

Optoma is able to offer the latest in projection interactivity. Have the option to use interactivity from anywhere in the room or just at the whiteboard.



## Wireless interactive connectivity



### Network display

Split screen support allows up to four screens to be simultaneously displayed on a single projection. The ability for multiple visuals can be used to enhance a presentation or lesson with supporting images and videos without switching between applications and interrupting the lesson.

Displayed screen can also be sent to local area networks and projected by up to 8 projectors at the same time. Great for instructing large lecture halls or multiple rooms.



4-in-1 split-screen projection



## Flexible networking and control

### Network management

Ensuring every projector in the building is working as it should is time consuming and expensive. Network LAN control using the free Crestron RoomView® express software makes it simple and easy to manage allowing you to view the status of up to 250 projectors.



1 to 8

### Simple management, display and control



24/7 real-time alert system providing feedback for lamp life, power status and unit presence



Email alerts for lamp replacements



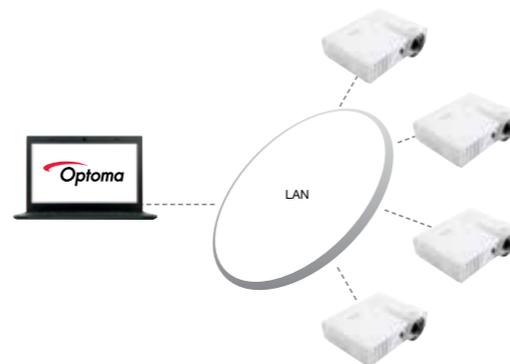
Automated scheduling features, such as power on and off



Setting adjustments, such as inputs, brightness and volume



Emergency text broadcast capabilities for urgent or important announcements



## HDBaseT®

### Simplifying installation and control and future-proofing your AV equipment

Optoma offers a number of projectors with HDBaseT®. This not only allows data to be sent over a much greater distance than HDMI but can also carry HD video, audio, ethernet, power and control on a single cable. It significantly cuts down the number of cables needed for a typical education installation and future-proofs your investment in technology.



## Outstanding quality and reliability

The latest DLP® projection technology helps you to deliver clear, bright and colourful lessons that captivate and inspire your students making learning fun and engaging.

### Detailed projection

Lessons in the classroom and presentations in a university lecture hall demand sharp, flawless images. DarkChip3™ technology from Texas Instruments produces exceptional contrast ratios for pin sharp graphics and crystal clear text. The crisper whites and ultra-rich blacks mean images come alive and text is easier to read.



Low contrast

DarkChip3

### Amazing colours

Grab your students' attention with bright, vivid projected images thanks to the BrilliantColor™ technology incorporated within all Optoma projectors.



### BrilliantColor™



Without



With

### Colour guarantee

We are so confident the image colour quality of our projectors will remain as good as the day you bought it Optoma will guarantee it for five years.

### After 5 years of DLP® projection



0 Hours



10,000 Hours

### DLP technology

Optoma projectors use DLP® technology, pioneered by Texas Instruments. The DLP® chip in each projector contains millions of mirrors to produce high quality imagery which does not suffer colour degradation over time, as sometimes experienced in other projector technologies.

DLP projectors have a dust-sealed, filter-free design that prevents dirt and dust affecting the system. This means they need very little maintenance as there are no filters to remove and clean.



## 3D learning

### Improved

- ✓ **Comprehension**
- ✓ **Information retention**
- ✓ **Engagement**
- ✓ **Conceptualisation**
- ✓ **Attainment**

Bring ideas to life with 3D projection! The latest educational resource opens up new avenues of learning for both teachers and students alike.

Explore the world, travel through space and see inside the body...Optoma Full 3D projectors propel education to a whole new level of immersion and enjoyment.

### Why is 3D important?

"The research results indicated that the pupils had a strong preference for visual and kinaesthetic learning, with 85% of the pupils preferring seeing and doing, while only 15% of pupils preferred hearing."

### The impact of 3D on academic results

"The results of the research indicate a marked positive effect of the use of 3D animations on learning, recall and performance in tests. Under experimental conditions, 86% of pupils improved from the pre-test to the post-test in the 3D classes, compared to only 52% who improved in the 2D classes."

### The impact of 3D on classroom interactions

"In class with 3D you have the 'Wow' effect. This helps with behaviour. The pupils are too interested to be disruptive. They get involved and forget to be naughty! I would like to keep using it and use it for different topics."  
– Teacher comment.

*Extracts taken from: The "3D in Education" White Paper written by Professor Dr Anne Bamford, Director of the International Research Agency.*

For more information on 3D, visit: [www.optoma.com](http://www.optoma.com)

### Abbey School case study

The Abbey School considers DLP the technology of choice. Kathryn Macaulay, Deputy Headmistress at The Abbey School, said:

"We use DLP projectors made by Optoma, the main criteria being that every projector we purchase uses DLP technology. DLP projectors offer great picture quality in both 2D and 3D, good value for money and are very reliable. The priority for us is that we can run 3D content to help our pupils learn using the best possible resources."

Abbey School:  
First classroom in the world to trial 3D projection, UK





## Innovative education tools

### Visualise more detail

When it comes to teaching, it's often the detail that counts and more is always better here. Being able to show this detail, particularly for experiments or small items with a large audience can be difficult – but a huge advantage.

With the document cameras from Optoma, you simply position items under the camera, connect it to a projector or panel and show everything on the big screen live as it happens. This gives stunning image quality and allows the class to see detail often not visible to the human eye.

Suitable for classrooms and lecture theatres, it's a great way to give your students a more interactive learning experience.

Optoma visualisers are engineered with a high quality camera, zoom and can take photos or record video.

You can even take a video of a science experiment, save it either on your PC/laptop via USB or to a SD Card, and use it in your next class. Students can also record their demonstrations for later review.

These powerful and robust devices are full of useful features that can revolutionise lessons.

For more information visit: [www.optoma.com](http://www.optoma.com)





## Accessories to complete your installation

### Mounting solutions

Optoma has a range of mounting solutions in both white and black to provide the complete solution for your installation. Choose from ceiling mounts - pole or flush, short throw or ultra short throw wall mounts or a table mount that will turn your table or floor into an interactive surface when used with an interactive ultra short throw projector.

### Wireless options

Share content on a big screen wirelessly from your mobile device, tablet, laptop, PC or Mac. Easy to set up and use, Optoma's wireless devices are great for meeting rooms, classrooms and lecture theatres. Visit our website to see the full range with details on compatible projectors.

### Screens

Optoma screens are available in a wide range of sizes and styles including wall/ceiling mountable, manual pull-down, electric and portable pull-up.

### 3D glasses

Choose between RF or DLP® Link™ 3D glasses. These lightweight glasses are fully rechargeable and will fit over most prescription glasses.

### Upgrade your ultra short throw projector from Epson to Optoma

Schools and universities that need to replace their existing Epson ultra short throw (UST) projectors and do not want the hassle of getting new fittings can easily upgrade to an Optoma Full HD model using our projector mount adapter.

The adapter simply fixes to any existing Epson UST wall mount allowing a new Optoma UST projector to be installed in literally minutes.

Watch our video on how quick and easy it is to swap out an old Epson with a new Optoma projector.

Visit the Education section on [www.youtube.com/OptomaEMEA](http://www.youtube.com/OptomaEMEA)

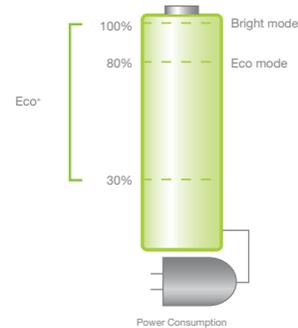
## Energy saving

### Saving energy = saving money

Eco+ technology from Optoma helps to reduce the impact on the environment.

### Eco+ mode

Saving energy, saves money! Eco+ technology reduces the power consumption to as little as 30%. This intelligent feature also has a positive effect on the lamp life, increasing it up to 70% while lowering the total cost of ownership and reducing maintenance.



### Auto power off

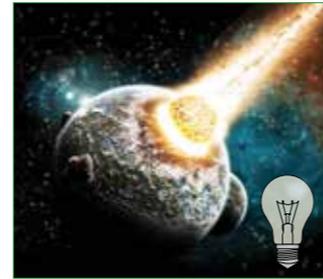
There may be instances when the projector is left running when not in use. To help save energy if the projector is left running and no source is detected, the “auto power off” feature automatically turns off the projector after a set period of time.

### Dynamically adjusts the brightness and power



#### Bright scene

~100% power consumption



#### Dark scene

~ 30% power consumption

### Eco AV mute

Stay in control of your presentation with the Eco AV mute feature. Direct your audience's attention away from the screen by blanking the image when no longer needed. This also instantly reduces the power consumption to 30%, further prolonging the life of your lamp.

### Lamp-less laser-phosphor technology

Optoma's lamp-less laser-phosphor technology not only produces constant brightness and great colour but is also incredibly energy efficient. The light source requires minimal warm-up and cool-down time and boasts a long life of up to 20,000 hours. This technology cuts out the need for lamp and filter replacements to give a low total cost of ownership and minimal maintenance.

## Reach your green goals



Our range of education projectors have an eco-friendly design, help to reduce your carbon footprint and conserve power.

### Design and packaging

We have designed our products to have a long usable life, use fewer materials, ship with minimum packaging and be free of many toxic substances. With each new product, we strive towards minimising our environmental impact.

### Energy efficiency

Optoma is at the forefront of introducing the most energy efficient products in the industry.

- Less than 0.5 Watt power consumption in standby mode. Optoma was the first company to introduce projectors that consume up to 75% less energy compared to regular standby mode.
- Optoma products are designed to limit energy use with features such as ECO mode, automatic shutdown and remote management and control.
- Lamp savings – the projector lamp automatically turns off after 10 minutes with no input signal, so you save on electricity, your lamp lasts longer and you reduce your replacement costs.
- We are developing new technologies to not only increase lamp life but also to reduce use of the Earth's valuable resources.

### Recycling

Optoma designs products that last. Our approach to recycling begins with making our products efficiently with as few materials as possible. We've also consistently improved the lamp-life of our projectors, saving you money and producing less waste. Nevertheless, at some point there will come a time when it will be necessary to recycle your product. We here at Optoma fully subscribe to the WEEE Directive which aims to reduce the amount of electrical and electronic equipment being produced and to encourage everyone to reuse, recycle and recover it.

## Optoma's interactive ultra short throw range

Optoma's 319 and 320 ranges of super bright, ultra short throw projectors, feature both interactive and non-interactive models in 1080p, WXGA and XGA resolutions.

### Super-size and shadow-free:

Project a 100" image from just 55cm away. Having the projector so close to the screen avoids any shadows from the presenter.

### Versatile:

They can be wall, ceiling or even table top mounted to create an interactive surface without the need for a screen or interactive whiteboard.



### Key features:

- Interactive (multi touch points or pen) and non-interactive models available
- Fast and simple set-up – preassembled wall mount and auto calibration
- Super bright – up to 3,500 ANSI lumens (319 range) or 4,000 ANSI lumens (320 range)
- Powerful 16W built-in speaker
- Full 3D, large shadow-free images
- Flexible installation: 2x HDMI, 2x VGA, RJ45, RS232
- Throw ratio 0.25 (1080p), 0.27 (WXGA) or 0.33 (XGA)



## Choosing the right projector

When choosing the right projector there are a few factors that need consideration, such as the room size, number of students and ambient light levels. Use the following guides to help you find the ideal projector for your application.

Projector type based on room size		
Room size	Number of students	Recommended projector brightness
Small	0 – 30	2500 – 3000L
Medium	30 – 50	3000 – 3500L
Large	50 – 100	3500 – 4000L
Lecture hall and auditorium	100+	4000L+

Projector brightness required based on ambient light		
Ambient light	Room description	Recommended minimum brightness
Dark room	No windows	500 lumens
Low ambient light	Very little lighting from internal lighting or external windows	1,000 lumens
Medium ambient light	Low amounts of light from internal lighting and external windows	2,000 lumens
Bright ambient light	Large amounts of light from internal lighting and external windows	3,000 lumens

Choosing the right projector can seem quite daunting, with so many factors to consider. We can help you find the right equipment for your classroom, lecture theatre, hall or meeting room. Give us a call or drop us an email and we will give you advice on what you might need.

## Glossary of terms



### Full HD 1080p

1080p resolution gives you sharp and detailed images from HD content without downscaling or compression; perfect for watching Blu-ray movies, HD broadcasting and playing video games.



### HD Ready

HD Ready projectors can display 720p/1080i High Definition pictures. You'll still see a big improvement from 720p/1080i HD pictures, though you won't see every last detail from sources such as Blu-ray (1080p) discs.



### Full 3D

Full 3D projectors can display true 3D content from almost any 3D source, including 3D Blu-ray players, 3D broadcasting and the latest generation games consoles. Support for 144Hz rapid refresh rate provides ultra-smooth flicker free images.



### LED

Lamp free LED projectors are more energy-efficient than lamp based projectors and have a much longer life span (up to 20,000 hours).



### Eco+

Eco+ technology brings together high contrast, improved lamp life and energy saving features that are easy to use while reducing power consumption.



### USB power

USB power can be used to power a HDMI dongle, such as Google Chromecast or the Optoma WHD200 wireless HDMI device.



### Speakers

Built-in speakers provide exceptional sound quality and are easy to set up without the need for costly external speakers.



### Lens shift

Lens shift gives you the ability to move the projected image up or down and left or right, while keeping the projector stationary. This makes it easier to position the projector in your room and enables a wider range of screen size options.



### Media player

A handy integrated media player means you can use the projector as a stand-alone device, retrieving content from the internal memory, USB stick or a memory card.



### Ultra short throw

An ultra short throw lens produces an impressive image greater than 100 inches from less than a metre away. This means you can place the projector closer to the wall, reducing shadows so you can present with ease; perfect for interactive applications.



### Short throw

A short throw lens produces larger screen sizes from a shorter distance. This means you can get a 100 inch image, with the projector placed just over a metre away from the screen or wall.



### TouchBeam interactive technology

Optoma's finger-touch technology allows several people to work simultaneously on the projected screen without using a pen. TouchBeam makes it easy to open documents or web browsers and draw, annotate, zoom and rotate images on the projected image.



### Laser phosphor technology

Laser phosphor projectors use lasers to create an image rather than traditional lamp-based or LED technologies. This lamp-less light source creates consistent brightness and great colour with minimal maintenance and a long life.



### MHL®

Turn your projector into a smart display by connecting a smartphone or tablet with a single cable using MHL to play games, stream videos and share photos on the big screen.



### HDBaseT®

HDBaseT allows data to be sent over a much greater distance than HDMI and can carry HD video, audio, ethernet, power and control on a single cable.

## Peace of mind

Optoma projectors are designed and built to the highest standards. DLP projectors have a dust-sealed, filter-free design that prevents dirt and dust affecting the system. This means they need very little maintenance as there are no filters to remove and clean. As with all equipment though, when used continuously in an education environment, they will need servicing to ensure reliable operation.

Through our partners, you'll have access to what is probably the most extensive network of service centres across Europe of any projector manufacturer. And our dedicated regional helplines are on-hand to answer questions. Contact details can be found on our website.

### Extra peace of mind

Optoma offers additional services and extended warranties. Contact us for more information.

[www.optoma.com](http://www.optoma.com)



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