

Our waveguides and projectors unlock the potential of augmented reality for the mass market.

www.enhancedworld.com



Projectors designed in-house to match our waveguide specifications, to ensure the best possible AR image creation.

WAVEOPTICS PROJECTORS

Our waveguides already offer the broadest range of fields of view and we are now positioned to offer our own in-house purpose-designed and manufactured projectors to support our customers in developing a full AR optical solution.

- Designed specifically for waveguide use
- High resolution (pixels per degree)
- Range of fields of view
- High efficiency with low power consumption
- Top and side injection
- Customisable - see 'flexible design approach' opposite
- Meets all requirements with high volume yield
- Electronics interface available for mobile/laptop.

DESIGNED FOR OPTIMUM PERFORMANCE WITH OUR WAVEGUIDES



28° projector (MARS)
available in Q1 2020

RANGE OF PROJECTOR TECHNOLOGIES



40° projector (SATURN)
is available today.

MARKET LEADING PROJECTORS CREATED FROM NEW PARTNERSHIPS



55° projector (PLUTO)
Built initially to support our Ultra-High Field of View demos

FLEXIBLE DESIGN APPROACH

We recognise that as a customer moves through their evaluation of AR technology and product design, their customisation needs and demands develop. We are able to support customers through each stage of their product prototyping with evaluation kits and modules, as well as discussions to support detailed customisation options.

Projector form factor and power requirements are significant design considerations – with the key attributes that dominate – shape and volume

Customisation of projectors is possible, but can be expensive with potentially marginal benefits.

As our waveguide portfolio develops, we are increasing our projector portfolio to match, both from a field of view as well as new technology perspective.

As part of our waveguide customisation programmes, we can also consider specific projector design requirements to ensure the best possible AR image creation, bringing out the best in both technologies.

TECH SPECS

| | NEPTUNE | MARS | SATURN | PLUTO |
|-----------------------------------|-------------------|-------------------|-------------------|-------------------|
| Field of View (degrees) | 28° | 28° | 40° | 55° |
| Projector technology | DLP | LCOS | DLP | LCOS |
| Image orientation | Portrait | Square | Landscape | Landscape |
| Aspect ratio | 9:16 | 1:1 | 16:9 | 16:9 |
| Display resolution (px) | 480x584 | 720x720 | 1280x720 | 1980x1080 |
| MTF (Cycles/degree) | 18 | 18 | 18 | 18 |
| Flux at exit pupil (Lumens/Watts) | >6 | >6 | >10 | >6 |
| Projection type | Colour sequential | Colour sequential | Colour sequential | Colour sequential |



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