TECHNOLOGIES

Customers want a security system with lowest total cost of ownership

- Ultra wide horizontal field of view (HFOV) reduces the number of cameras required
$\checkmark \quad$ Up to $120^{\circ} \mathrm{HFOV}$ with SY110
$\checkmark$ Up to $135^{\circ} \mathrm{HFOV}$ with SY125
$\checkmark$ Save money on installation, maintenance, and monitoring
- Multi megapixel lens resolution allows the use of up to 5MPix camera
$\checkmark$ Digital PTZ eliminates the cost of installation and monitoring of mechanical PTZ

Complete coverage requires 18 high res cameras with (typical) 4mm lenses


Complete coverage accomplished with 8 Theia lenses and megapixel cameras


Customers want a hassle-free, easy to use video surveillance system

- Real time, optical distortion correction using patented Linear Optical Technology ${ }^{\text {TM }}$
$\checkmark$ Straight lines remain straight in the image
$\checkmark$ Eliminates the need for de-warping software
- Standard CS mount adapts to most box cameras
$\checkmark$ Camera recommendations listed at www.TheiaTech.com/cameras.html


Customers want a video system that works continuously 24x7

- Day/Night corrected optics maintain focus with IR illumination
$\checkmark \quad$ SY110 is Day/Night corrected for use with Day/Night cameras

TECHNOLOGIES

Customers want a clear record of events

- Optical distortion correction increases image resolution at the edges of the image
$\checkmark$ Greater resolution increases the likelihood of recognition and identification
- High quality multi-megapixel optics give a clear image

Image area taken with typical barreldistorted lens shows decreased resolution


Same area of the image taken with Theia's lens shows increased resolution at the edge


## Theia lens FAQs

Q: What is the best application for Theia's lenses?
A: There are many applications including parking lots, checkout stands, critical infrastructure, power lines, borders, road intersections, corner camera, etc. Theia lists applications at www.TheiaTech.com/applications.html.
Q: Why is my image upside down?
A: Theia's patented Linear Optical Technology ${ }^{\top M}$ which allows ultra wide no distortion images also inverts the image. This can be corrected in the camera software or by mounting the camera upside down.
Q: Can I zoom in and read a license plate across the parking lot?
A: Due to Theia's ultra wide field of view, the pixels of the camera must be spread over a very large area. This reduces the number of pixels per foot in the image. We recommend a dedicated LPR camera at a parking lot entrance and use Theia's lenses as overview and tracking of the car through the lot. We have a lens calculator for calculating resolution and camera distance at www.TheiaTech.com/calculator.html.
Q: Can I use Theia's lenses with any camera?
A: Theia lenses come in CS mount, manual and auto-iris versions. Because the camera's pixels are spread across a wide HFOV, we recommend high resolution and megapixel cameras. See our list of compatible cameras at www. TheiaTech.com/cameras.html.
Q: Can I use Theia's lenses with any enclosure?
A: Theia recommends enclosures on our website www.TheiaTech.com/accessories.html. The front window of box enclosures needs to be about 4" wide and the lens should be close to the window to avoid impinging the view. 6" and larger dome enclosures may also be used with Theia's lenses and are preferred over box enclosures.
Q: Why are the lines in my image leaning over?
A: Theia's rectilinear lenses create 3D stretching which increases the image resolution at the image edges. This is better described in Theia's white paper found at www. TheiaTech.com/eliminatedistortion.html.

