EASE OF USE AND ZERO SET UP TIME
Designed for rapid 360º imaging, iSTAR precisely captures 360º full spherical images and high resolution panoramic video streams for efficient visual documentation of an environment.

iSTAR is rugged, lightweight and has a small footprint making it easy to transport and deploy. With zero set up time, iSTAR does not require photographic experience to operate. With one button capture, it’s fast and easy-to-use either indoors or outdoors.

FAST, ACCURATE AND PRECISE
iSTAR has 4 x pre-calibrated sensors delivering a 50MP full spherical accurate image with excellent high dynamic range. iSTAR is fast at capturing images with typical capture times of 2 to 3 seconds. Typically 80 to 100 panoramas can be captured on one battery charge. This can be increased to over 600 when using the optional external battery allowing you to capture throughout the full day.

Processing and stitching the images is also fast. NTech’s desktop application Immersive Studio, which is supplied with iSTAR, can batch stitch images in seconds. Full 360º video can also be processed in a matter of minutes.

SEAMLESS INTEGRATION
iSTAR deliverables can be seamlessly integrated into your work flow. The deliverables from iSTAR are industry standard compatible and can be used with your existing software.

MODELS AND VERSIONS
iSTAR is available in two software models, FUSION and PULSAR both of which capture the full spherical environment. PULSAR offers extended capabilities over FUSION, including 360º video capture at high frame rates with live full immersive video preview, and fast capture for mobile mapping and surveillance applications.

An infrared (IR) iSTAR version is available for capturing both panoramic images and 360º video in zero light conditions.

MULTIPLE APPLICATIONS
iSTAR has been designed to provide rapid imaging, site documentation and accurate measuring across a variety of applications in geographic information systems (GIS), law enforcement, military and media.

iSTAR is well suited for any application requiring high resolution, fast, accurate 360º images that not only capture the location precisely but also the position. Typical applications include forensic image documentation, situation awareness, geospatial documentation and vehicle-based photogrammetry.

iSTAR SDK FOR INTEGRATIONS
A developer SDK platform is available for authorised development partners to create bespoke solutions and allow iSTAR imaging technology to be integrated into existing hardware and software systems and for developing new proprietary applications.

KEY FEATURES OF iSTAR
- Rapid image capture: Capturing images take approx. 2 to 3 seconds
- Easy-to-use with one button push to operate
- Capture 360º still images and video
- Generates GIS map positions from captured images or video
- Seamless integration of images into third party applications
- Totally mobile: capture over 600 images on one charge using optional external battery.
- Automatic HDR
- Live remote control with full immersive view from tablet PC over WiFi
- Fast “real-time” stitching of images
- Can be vehicle mounted or inverted for surveillance and remote monitoring

KEY APPLICATIONS OF iSTAR
- TACTICAL RESPONSE PLANNING
- 3D DEFENCE DOCUMENTATION
- ROV OVERVIEW FOR LEAK SCANNING
- STREET VIEWS FOR MOBILE MAPPING
- TRENCH COLLISION DOCUMENTATION
- ASSET DOCUMENTATION AND VALUATION
- REMOTE SURVEILLANCE AND OBSERVATION
- 3D MODELLING AND MAPPING

ISTAR RAPID 360º IMAGING SYSTEM
- Test IRIS Vision Camera
- Live Remote View and Capture over WiFi
- Integrated Compass and Tilt Sensors
- GPS integration
- FOV: 360º x 275º
- 1/4” Tripod Thread
- Rechargeable, removable battery
- 4 x pre-calibrated sensors
- Automatic HDR and ISO
- Small footprint: 10cm²
- High resolution imaging: 50 MP panoramic image
- Automatic HDR and ISO
- Rechargeable, removable battery
- 1/4” Tripod Thread
- Small footprint: 10cm²
- 4 x pre-calibrated sensors
- Live remote viewing and capture over WiFi
- Integrated compass and tilt sensors, GPS integration
- FOV: 360º x 275º
- 1/4” tripod thread
ISTAR TECHNICAL DATA

ISTAR FUSION

BODY
Dimensions: 104mm x 104mm x 115mm
Weight approx. 1.4Kg
Material: Aluminium hard anodised
Protection IP64: Rugged, robust, splash-proof, dust proof
Mount: 1/4" tripod thread
Removable battery
Internal WIFI antenna
Rubber seals reveal DC input, SD, USB and Ethernet ports
White LED light pack (Optional available soon)

VIRGINING
Full spherical 360° x 275° +/- 5° image
Simultaneous and independent captures from 4 lenses
4 x 10Mp sensors/effective 50 megapixel output
Up to 10,000 x 5000 +/- 7%
Capture time approx. 4 to 6 seconds for full 360º image (1 exposure)
Auto white balance
Variable focus, fixed aperture
No moveable mechanics in lenses and optics assembly
HDR - Automatic HDR processing on/off

OUTPUT FILE TYPES
PNG, JPG, Equirectangular and cube formats

INTERNAL PROCESSING
Enhanced HDR: Configurable sequential exposures (3 up to 9 exposures)
Select HDR processing on/off
In-picture mode (does not capture user in image)
In-camera playback of images, with zoom and pan controls

CONNECTIVITY
DC input socket
Gigabit Ethernet (RJ45) port
USB2 ports: type A/mini type B
SD/SDHC card socket
WIFI 802.11b/g/n

CAMERA CONTROL INTERFACE
BiColr colour 2.4" resistive LCD touchscreen, can be used with gloves on
Factory reset
All iSTAR features available through touchscreen and configurable
Audio alert indicate
Timer capture delay

BATTERY AND POWER
12V mains power adapter, 2.1mm jack
Rechargeable, removable Lithium-ion 7.4V 4400mAh battery
In-camera battery charging/Option external charger
Approx. 6 to 8 hour battery life in use 4 hour standby mode
Soft power switch
Battery level display/power down when low

OUTPUT FILE TYPES
USB or SD/SDHC card supports 32GB, FAT format

FIRMWARE
Updatable online

COMPATIBILITY
Windows

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www.nctechimaging.com

Descriptions and technical specifications are not binding and may change without notice. Certain specifications and features may require a firmware update to be operational.

ISTAR PULSAR

Below are the extended functionalities included with iSTAR PULSAR. Firmware update from iSTAR FUSION required.

LIVE REMOTE CONTROL AND PREVIEW TO OPTIONAL TABLET
Live up to 60 FPS preview
Live interactive “street view style” video preview and 2D flat view
Pencil zoom, swipe to pan

SECURE WIRED REMOTE CONTROL
Global remote operation over Ethernet, Infrastructure
Live interactive “street view style” video preview and 2D flat view
Full-screen view in live and playback modes

SENSORS
Tilt & roll: auto level image correction
Digital compass: magnetic north logging to image data

OPTIONAL EXTERNAL PC PROCESSING
Batch post processing feature
Batch exposure stacking (HDR) 1 to 9 exposures per Image

VIEW SAMPLE DATA:
www.nctechimaging.com

CONNECTIVITY
DC input socket
Gigabit Ethernet (RJ45) port
SD/SDHC card socket
USB2 ports: type A/mini type B
Adhoc remote WIFI connectivity

CAMERA CONTROL INTERFACE
BiColr colour 2.4" resistive LCD touchscreen, can be used with gloves on
Power on/off
Factory reset
All iSTAR features available through touchscreen and configurable
Audio alert indicate
Timer capture delay

BATTERY AND POWER
12V mains power adapter, 2.1mm jack
Rechargeable, removable Lithium-ion 7.4V 4400mAh battery
In-camera battery charging/Option external charger
Approx. 6 to 8 hour battery life in use 1.4 hour standby mode
Soft power switch
Battery level display/power down when low

OUTPUT FILE TYPES
Usb or SD/SDHC card supports 32GB, FAT format

FIRMWARE
Updatable online

COMPATIBILITY
Windows

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360º VIDEO
360º MEASUREMENTS
360º PANORAMICS
360º LiDAR