

 nctech

iSTAR[®]

360 degree rapid imaging

OVERVIEW

Designed for rapid 360° precision imaging, iSTAR is a 360° panoramic camera that captures full spherical images, providing efficient visual documentation of the surrounding environment.

Versatile, rugged and portable, iSTAR can be tripod mounted, vehicle mounted or networked. With a small footprint and a one-button capture, iSTAR is fast and easy-to-use either indoors or outdoors.

4 x pre-calibrated lenses deliver a 50 megapixel full spherical panoramic image with excellent high dynamic range. iSTAR is fast at capturing images with typical capture times of 5 to 7 seconds.

NCTech's desktop application Immersive Studio, batch stitches images in under a minute.





FOV: 360° X 137.5°



Ruggedised: IP 64 rated



Small footprint



High resolution 50 megapixel panoramic image



4 x pre-calibrated lenses



Capture over WiFi



Automatic HDR Modes



Integrated compass and tilt sensors GPS integration



Rechargeable removable battery



3/8" tripod thread



SECTORS

A wide range of sectors benefit from iSTAR's rapid 360° data capture capabilities.

PUBLIC SAFETY

- Scenes of crime
- Collision investigations
- Public order events
- Tactical visual documentation

MILITARY

- Rapid Reconnaissance
- Tactical Response Planning
- Pre Visualisation
- Threat Assessment

HERITAGE

- Visual Documentation
- Heritage Documentation
- 3D Digital Visualisation
- 3D Modelling & Mapping

ENGINEERING

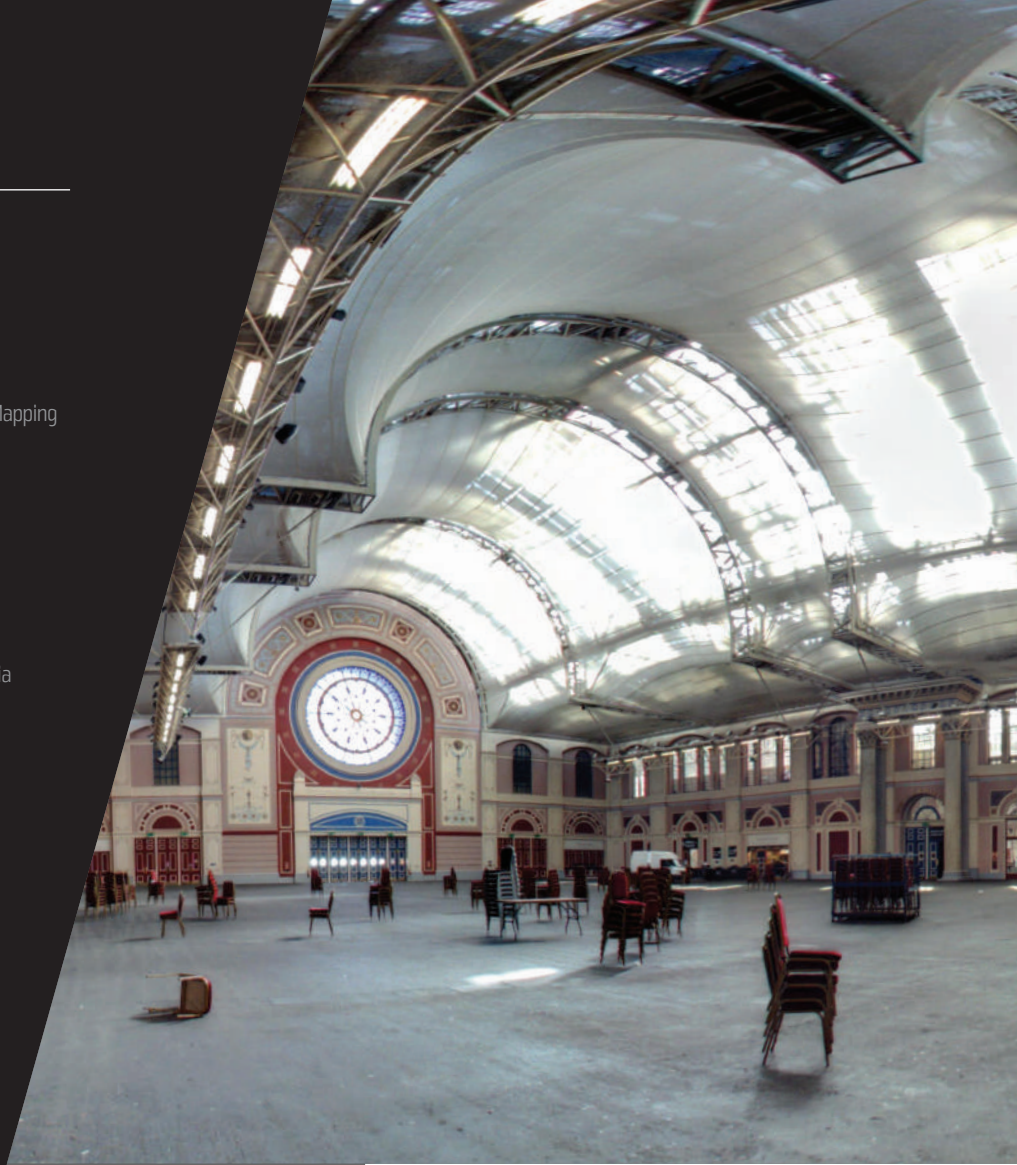
- Airborne Photography & Mapping
- Asset Management
- Visual Documentation
- Mining & Monitoring

MEDIA

- Street Mapping
- Spherical Interior Imaging
- Broadcast Immersive Media
- Virtual Tours

GOVERNMENT

- HM Revenue and Customs
- Border Control
- Immigration Security
- Ports and Harbours





HDR IMAGE
Alexandra Palace, London

APPLICATIONS

iSTAR is well suited for any application requiring high-resolution, fast, accurate 360° images.

Typical applications include forensic image documentation, situation awareness, asset documentation, geospatial documentation and vehicle-base photogrammetry.



RGB point cloud colourisation



360° monitoring and surveillance



Mobile mapping



Photogrammetric measurement



"Street view" type imaging



Crime scene investigation



Destination marketing



Asset management and visual documentation







KEY TECHNICAL CAPABILITIES



MEASUREMENTS FROM DATA

iSTAR is a high precision capture system engineered and calibrated precisely to deliver highly accurate data. This enables measurements to be extracted from the images captured.

iSTAR's typical accuracy is 10mm over 10 meters (+/- 1mm).

Extracting measurements from stereo-pano iSTAR images is possible in several third-party software applications.

A Measurement Module SDK is also available for third-parties to build this iSTAR measurement capability into their own software.



HDR & EXPOSURE FUSION

A key feature of iSTAR is its high dynamic range capabilities (HDR) with an impressive EV range of 27 f-stops. This enables iSTAR to capture the true colours and a light variant in a scene ensuring no data is lost.



DATA WITH POSITIONING

GPS receivers can be connected to iSTAR to record the position and location of the data captured. iSTAR has been tested and is compatible with a wide range of industry standard receivers including high end IMU's for higher accuracy.

iSTAR's internal sensors record the compass positioning as well as tilt variations during capture. The data is written directly to the images and the EXIF data and is retained throughout the post-processing work-flow.

iSTAR can be set to capture a single exposure, five, or set to fully automatic where the location is automatically analysed prior capture to determine the best EV capture range.



Sports arena
Media & Entertainment



Crash scene investigation
Law enforcement



Asset documentation
Engineering



Spanish villa
Destination tourism

iSTAR was very impressive. It's size, ease of use, portability and image quality make it a worthy companion for our FARO Focus Laser Scanners.

Andrew Maltby Mrics. Director. Maltby Surveys

To us iSTAR was a revelation! It has become one of the first bits of kit that comes out of the car and is used by every member of the team.

Colin Humphreys. Forensic Collision Investigator. Warwickshire Police

I am really liking what this unit can do in the dark with HDR. I can see how the iSTAR could be applied to crime and accident scenes, but just as well to caves, tunnels, manufacturing...

Eugene Liscio. Forensic Expert. Ai2-3D

We have three different scanners each of which is fitted with a bracket on to which we mount the iSTAR and it works well with all of them.

Ben Bennet. CTO Digital Surveys


iSTAR is easy to use - just like a 'point and click' camera. It does what it says on the box! The thing I like about it is its very good low light capability, especially in the HDR mode. A lot of the work we do happens at night and it picks up good quality images with minimal lighting. That, plus the portability, confined space capability and the ruggedness of it really helps in the environments we work in.

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