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iSTAR®
360 DEGREE RAPID IMAGING

Instantly capture, create and distribute 360° spherical images with iSTAR imaging technology. iSTAR with it's multi lens array allows for rapid image capture of an entire environment with full 360° spherical coverage.

FULLY AUTOMATIC, INSTANT, 360 DEGREE PANORAMIC SYSTEM DELIVERING HIGH RESOLUTION SPHERICAL IMAGES IN SECONDS

KEY BENEFITS AND FEATURES OF iSTAR

50 megapixel resolution output: approx. 10,000 x 5,000 pixels +/- 5°

Small rugged and light: approx. 10cm cubed. Weight: 1.4 Kg

Fully automatic and instant capture from four lenses

No setup or assembly/one button push to operate

Automated enhanced HDR (from 3 to 9 exposures)

Integrated WiFi, GPS, compas and tilt sensors

Standard output file types

Mains chargeable, removable battery, external charger (optional)

Full control via touchscreen

Remote capture from wireless device

Spherical verification of captured image

KEY APPLICATIONS

Scenes of crime
Collision investigations
Public order events
Incident/training analysis
Facility visual documentation

Remote unattended observation
On-board vehicle surveillance
Forensic image documentation
Geospatial data documentation
Tactical visual documentation

VIEW SAMPLE PANORAMICS TAKEN WITH ISTAR AT

www.nctechimaging.com

FULL SPHERICAL PANORAMIC IMAGE: 10,000 X 5,000
360° x 275° FOV
50 MEGAPIXEL RESOLUTION
STANDARD OUTPUT FILE TYPES

EASE OF USE AND ZERO SETUP TIME

iSTAR is the first 360 degree imaging system with the power to process its images internally. Crucially, iSTAR can be used by anyone and does not require special training or photographic skills. With zero set up time it is small, light weight and robust making it easy to transport, quick to deploy and for multiple locations to be photographed in minutes, not hours.

RAPID CAPTURE IN SECONDS

Current 360 degree imaging systems typically require around 10 minutes to capture and create a 50 megapixel spherical image. With iSTAR the image is captured in seconds in one single shutter release. With enhanced HDR, multiple exposures of a location can be captured quickly allowing for both light and dark areas to be viewed.

MODEL VERSIONS AND FEATURES

STAR is available in two software models - FUSION and PULSAR, both of which capture the full spherical environment. PULSAR offers extended capabilities over FUSION, including speed and time saving features to speed up productivity and provide even higher quality HDR images. It also offers a superior user interface with live full immersive video preview, network connectivity and fast capture for video surveillance and mobile mapping applications .

CUSTOM IMAGING SOLUTIONS

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 as well as develop new proprietary applications.

iSTAR TECHNICAL DATA

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 features to speed up productivity.

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360 DEGREE
RAPID IMAGING

iSTAR SPECIFICATIONS - FUSION/PULSAR

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 night pack (Optional/available soon)

IMAGING
Full spherical 360º x 275º +/- 5º image
Simultaneous and independent capture 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
Fixed focus, fixed aperture
No moveable mechanics in lens and optics assembly
High dynamic light range sensitivity

OUTPUT FILE TYPES
PNG, JPG, Equirectangular and cube formats

INTERNAL PROCESSING
Enhanced HDR: Configurable sequential exposures (3 upto 9 exposures)
Select HDR processing on/off
In-picture mode (does not capture user in image)

Immersive playback of images with zoom and pan controls

EXTERNAL PC PROCESSING CONNECTIVITY
DC input socket
Gigabit Ethernet (RJ45) port
SD/SDHC card socket
WiFi 802.11b/g/n
USB2 ports: type A/mini type B
Adhoc remote WiFi connectivity

CAMERA CONTROL INTERFACE
18bit colour 2.4" resistive LCD touchscreen, can be used with gloves on
Power on/off
Factory reset
All iSTAR features available through touchscreen and configureable
Audio alert indicator
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/Optional external charger
Approx. 6 to 8 hours battery life in use /48 hours standby mode
Soft power on/off
Battery level display/power down when low

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

STORAGE
Removable SD/SDHC card supports 32GB, FAT format

RATINGS
IP64 . CE/FCC

FIRMWARE
Updatable online

COMPATIBILITY
Windows

FUTURE ISTAR FUSION FEATURES COMING SOON

LIVE REMOTE CONTROL & PREVIEW TO OPTIONAL TABLET
Remote control and enhanced iSTAR functionality over WiFi
Live 2D preview up to 25 FPS
Live status including GPS, WiFi, battery, storage
Immersive playback of stored images with zoom and pan controls

INTERNAL PROCESSING
Image stitching and blending
Automatic HDR processing on/off

iSTAR PULSAR EXTENDED SPECIFICATION. (Firmware available soon)

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 25 to 60 FPS preview
Live interactive "street view style" video preview and 2D flat view
Pinch 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 tagging to image data

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

STORAGE
External USB mass storage
Network attached storage (NAS)

FAST CAPTURE FOR POST PROCESSING
4 unprocessed image streams
Full res: 50 megapixel output, 1 FPS/
Half res: 3 FPS/Quarter res: 10 FPS
Output: gigabit ethernet connection

ADVANCED INTEGRATION - SDK
MS Windows compatible Software Development Kit available to allow integration with existing 3rd party software applications. The SDK will allow the iSTAR to be controlled or communicate directly with systems such as remote monitoring or face detection and much more.

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

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CONTACT OUR AUTHORISED RESELLER