Leica Cyclone and the NCTech iSTAR panoramic camera delivers fast, accurate HDR colourised point clouds.

Leica Geosystems now offers the iSTAR panoramic camera integrated with the HDS scanning workflow. Together, Leica Cyclone software and the iSTAR camera deliver higher resolution HDR images, seamlessly improving field and office workflows for creating an immersive coloured point cloud.

In the field, users simply capture an iSTAR image at the laser scanner location with the simple push of a button; either indoors or outdoors. Anyone can quickly and easily operate the imaging system without any photographic experience.

In the office, Cyclone automates the process of fitting the image data to the scan data, typically within two pixel accuracy. This dramatically improved point cloud colouring increases user comprehension and provides spectacular visualisation in deliverables, such as TruViews or Fly-through movies.

- when it has to be right
Ease-of-use and little setup time
The iSTAR 360° panoramic camera is rugged, lightweight and has a small footprint making it easy to transport and deploy. With little setup 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 pre-calibrated sensors delivering a 50MP full spherical accurate image with excellent high dynamic range. Capture images with typical capture times as little as 5 seconds. Typically, 50 to 60 panoramas can be captured on one battery charge. Processing and stitching the images are also fast. A desktop application that is supplied with iSTAR, can batch stitch images in seconds.

Seamless integration
iSTAR images are seamlessly integrated into your Leica Geosystems laser scanning workflow. Simply drag and drop the images onto your Leica Cyclone data with automatic mapping of the HDR/RGB onto the laser scan data with two pixel accuracy.

Features and Benefits
- Rapid image capture shortens time in the field: Capturing images in as little as 5 seconds
- Easy-to-use: One button push to operate
- Seamless integration into Leica Cyclone
- Automatic HDR to capture multiple exposures resulting in crystal clear images
- Remote control from a tablet or phone over WiFi
- Rugged and lightweight making it easy to deploy
- Capture images in relatively low light

Specifications
- Dimensions: 104mm x 104mm x 115mm.
- Weight approx. 1.4Kg.
- Material: Aluminum Hard Anodized.
- Mount: 3/8 tripod thread.
- Removable battery.
- Internal WiFi antenna.

Images
- Full spherical 360° x 274° +/- 5° image.
- Simultaneous & independent capture from 4 lenses.
- 4 x 10Mp sensors/effective 50 MP output.
- Up to 10,000 x 5000 +/- 7%.
- Capture time as little as 5 seconds for full 360° image (1 exposure).
- Auto white balance.
- Fixed focus, fixed aperture.
- No moveable mechanics in lens and optics assembly.
- HDR - Automatic HDR processing on/off.

Output file types
- RAW & Equirectangular JPG formats

Battery & Power
- 12V mains power adapter, 2.1mm jack.
- Rechargeable, removable lithium ion 7.4V 4400mAh battery.
- In-camera battery charging/Optional external charger.
- Approx. 5 to 6 hours of image acquisition battery life. Charged storage life more than one month.

Storage
- Removable SD/SDHC card supports 32GB, FAT format.

Ratings
- IP64, CE/FCC.