

INCA3

"INCA3 provides unsurpassed power, versatility and accuracy."

Picture Perfect Measurements™

The **INCA3** camera is GSI's third generation **INCA** digital photogrammetric camera. It retains all the powerful features and proven design of **GSI's** revolutionary original **INCA** and **INCA2** cameras, while providing improved features including an integrated strobe, greater ease of use, higher accuracy, and wireless operation.

INCA3 combines a proven 8 MegaPixel CCD sensor with a powerful, but compact and robust industrial PC based computer.

The camera's light-weight but rugged design, combined with its integrated removable battery, wireless connectivity, and automatic exposure features make picture taking a breeze.

The camera can be operated off-line or on-line. For off-line operation, pictures are stored on removable flash memory. **INCA3** uses a fast and efficient proprietary compression algorithm that stores hundreds of images on the storage media.

For on-line operation, pictures are transmitted via the optional wireless connection or via the light-weight power/network cable. The choice is yours. Multiple cameras can be operated simultaneously on-line for real-time measurement of dynamic or static objects.



Whether the application calls for hand-held operation, remote control, or real-time measurement, **INCA3** has the power, versatility and accuracy to handle it with ease. Applications are found in the **aerospace, antenna, automotive, shipbuilding**, and a variety of other industries.



For more information on this exciting new development in measurement technology please contact GSI.



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Top 10 INCA Features and Benefits

1

High Accuracy

INCA3's advanced calibration techniques make it by far the most accurate photogrammetric camera ever made.

2

Robust

INCA3 is designed to operate in the demanding environments and conditions found in industry. INCA3 provides laboratory quality and accuracy without requiring laboratory conditions.

3

Portable

A notebook computer can be used with V-STARS for all configurations. The entire system can be carried on-board an airplane or checked as standard baggage, so INCA3 can go with you anywhere in the world.

4

Easy Handling

INCA3 can be set up and ready to shoot in seconds. There is no camera warm-up time. Taking pictures with INCA3 is even easier than taking pictures with a regular camera. The flash is integrated and there are virtually no settings to make. INCA3 does it all for you!

5

Image Compression

The embedded PC can quickly compress images (typically > 10:1), leading to far higher disk capacity and faster data transfer. Hundreds of images can be stored on a flash memory disk.

6

Simple Menu System

INCA3 has a powerful but simple menu system that allows you to easily control all aspects of photography.

7

Measurement Automation

The embedded PC can also process images immediately after each picture is taken so problems can be detected instantly.

8

Versatility

Along with INCA3's intelligence and flexibility, comes versatility. INCA3 can be integrated into single and multiple-camera configurations and supports various hardware options.

9

Multiple Interfaces

For off-line operation you can save the pictures to a PCMCIA Flash memory card, or transfer them wirelessly to a PC as they are collected. For on-line operations, you have the option of wireless connectivity or a simple combined power/network cable.

10

Upgradeable

INCA3's powerful, embedded PC and modular design allow easy upgrades of both the camera firmware and hardware.



Specifications

Sensor:	12-bit, 8MP (3500 x 2350)
Image Size:	8MB uncompressed, 800k typical using proprietary compression
Field of View:	77° x 56°
Accuracy:	5µm + 5µm/m (0.025mm@4m, 0.001" @160")
Lens Focal Length:	21mm
Operating Temperature:	0 to 40°C
Power:	6 - 15volts DC, 15-25watts
Dimensions* (w x l x h):	8.3x4.9x5.4" / 210x125x135mm
Weight*:	<2kg/4.4lb
Acquisition Rate:	Burst rate: 8 shots @ 2fps Continuous Rate: 1 shot every 4-5 seconds after burst (typical)
Interfaces:	Ethernet 10/100, Wireless 802.11b, PCMCIA disks

* including lens, strobe and battery