+40 years

IGI Company Profile

Integrated Geospatial Innovations

With more than 40 years of experience, *IGI* is one of the world's leading geospatial companies and conducts business worldwide. We at *IGI* aim to provide our customers with durable and easy to use turn-key solutions, which offer high-end quality in its deliverables at best possible accuracy. With the I*GI Modular Concept*, *IGI* offers not only the integration of various sensors but also complete sensor systems for airborne and terrestrial survey missions. *IGI* ensures that our clients achieve sustainable and ***I***ntegrated ***G***eospatial ***I***nnovations.

Mission Planning & Documentation

The advanced mission planning software *IGIplan* extends the well-known mission planning software *WinMP*. Featuring global coordinate system support, advanced sensor support for analog and digital aerial cameras, LiDAR and online scanners, *IGIplan* is the state-of-the-art mission planning software. Combined with *CCNS*, flights can be planned and flown in one workflow. The intuitive user interface and real-time calculation of flightlines support the user in his daily work. Exporting the mission plan to Bing Maps™ or Google Earth™, results can be quickly presented to customers.

Flight Management Solution

The Computer Controlled Navigation System - *CCNS* - today is one of the leading solutions for aircraft guidance and sensor management.
The 5th generation of *CCNS* systems is smaller, lighter and richer in functionality than its predecessor. With an extra bright and sunlight readable display, the system is state-of-the-art in flight guidance & sensor management equipment. Available display information can be personalized in size and colour for different users or scenarios. Map information is displayed in the background for easy orientation during the flight.
CCNS supports all common airborne digital & analog camera systems as well as other sensor systems as LiDAR, hyperspectral sensors, Synthetic Aperture Radar (SAR) etc.

GNSS/IMU Positioning Solution

In 1996 *AEROcontrol* was introduced, a GNSS/IMU system for precise determination of position and attitude of various sensors. To date. In 2016 *IGI* introduced a compact GNSS/IMU system. Amongst other, German DLR and Fraunhofer FHR use this solution for their sensors.

www.igi-systems.com

IGI Company Profile

Modular Aerial Camera Solutions

The *DigiCAM* series is a Modular Aerial Camera System for professional digital aerial photogrammetry. The product range varies from a medium format camera with 150 megapixels up to a large format camera with 486 megapixels. Because of the *IGI Modular Concept*, the solution is capable of capturing 2-IN-1, large format & oblique imagery in one single flight. Both color images (RGB) and near-infrared (NIR) images are captured.
Complementing the *DigiCAM* family is a system for professional airborne thermography, named *DigiTHERM*, featuring uncooled and cooled microbolometer FPA-detectors.

LiDAR Solutions (Light Detection And Ranging)

LiDAR is an optical remote sensing technology for distance measurement. Like the similar radar technology - which uses radio waves - the range to an object is determined by measuring the time delay between the emission of a light pulse and the detection of its reflected signal. *IGI* uses best of breed laser scanners from different brands for their LiDAR solutions to meet the optimal requirements. The *LiteMapper* series combine new, high-performance sensors with inertial waveform processing to record unlimited returns per laser pulse at a complete digital processing workflow. Coupled with *IGI*'s position and attitude determination system *AEROcontrol* for airborne applications and *TERRAcontrol* for land, rail and marine applications, these complete systems scan the Earth's surface. During post-processing, millions of points evolve to a landscape 3D model that is used in many applications.

To obtain accurate 3D models for building facades and reviewing road conditions, *IGI* and the British company 3D Laser Mapping joined forces to build a mobile mapping system - the *StreetMapper*.
In 2011 a solution for the rails was introduced. The *RailMapper* has been adapted from the well-proven system for streets and taken to railroads. High accuracy levels and dense point cloud data make the *RailMapper* practical for many mapping applications such as clearance measurement or rail surveying with overhead wires. Clearance measurements are used for the safe usage of railroads by normal trains and especially for oversize trains.

All three solutions are based on the *IGI Modular Concept*. In this way components of the system are interchangeable and can be used on different installations throughout the year.

+49 (0)2732 5525-0
info@igi-systems.com
+49 (0)2732 5525-25
www.igi-systems.com

IGI mbH
Langenauer Str. 46
57223 Kreuztal
Germany