

Production Programming
Solutions for...

ams

Magnetic Rotary Position Sensors

ISP_{nano}

High-Speed Production
In-System Programming (ISP)
Modules



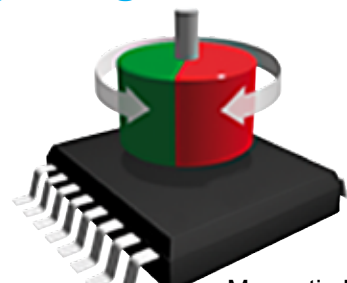
The Equinox '**ISPnano**' range of programmers offers a scalable production **In-System Programming (ISP)** and **calibration** solution for **ams Magnetic Rotary Position Encoder** devices.

The programmer handles all the real-time protocol and data transfer to / from a target ams encoder device. A **Remote Application** (not included) running on a PC then controls the programmer and performs the full calibration and programming sequence. The '**ISPnano**' range includes single channel, multiplexed and gang (concurrent) programming systems catering for single ams sensors and dual-die sensors.

- Production-grade programming equipment
- Designed for high-throughput **In-System Programming (ISP)** of **ams Magnetic Rotary Position Encoder** devices
- **Scalable** programming solution - supports programming of single ams sensors and dual-die sensors
- High-speed production-orientated programming algorithms
- Supports both **ams 1-wire** and **ams UART** programming interfaces
- Comprehensive **ESD** and **over-voltage** protection on all programmer I/O pins and communication ports



Supporting...



Magnetic Rotary
Position Sensors



The Embedded Solutions Company



ISP nano

High-Speed Production In-System Programming (ISP) Modules

ams Sensor
Calibration Support



The **ISPnano Series III / Series IV** are state-of-the-art **ISP Programming Modules** designed for high-speed **In-System Programming (ISP)** of FLASH Microcontrollers and Serial Memory devices in a production environment.

- High-speed In-System Programming (ISP) designed for high-throughput production environments
- Compact physical size ideal for integration into ATE / Test Fixtures
- Designed to mount directly under the bed-of-nails in a fixture
- Comprehensive ESD and over-voltage protection on all programmer I/O pins and programmer communication ports

ams - device support:

- ams **AS5x63** family via ams 1-wire interface: AS5163, AS5263 (dual-die device)
- ams **AS5x62** family via UART interface: AS5162, AS5262 (dual-die device)
- ams **AS54xx** (3D sensor) via ams 1-wire interface: AS5410, AS5411
- ams **AS5403** (3D sensor) via UART interface: AS5403
- Please note: The **'dual-die'** devices require either an **ISPnano-MUX2** multiplexed programmer or 2 x **ISPnano** programmer to program both devices concurrently.

ams - custom programming features:

- Supports In-System Programming (ISP) / calibration of many ams **Magnetic Rotary Position Sensor** devices
- Direct programmer hardware support for all ams **1-wire** programming interfaces (ams 1-wire and ams 1-wire UART) to the target sensor device
- Programmer handles all the real-time protocol and data transfer to the ams sensor
- Supports sequential programming / calibration of up to 2 x target AS5x63 devices from a single programmer
- Supports concurrent programming of dual-die AS5263 and AS5262 devices using 2 x ISPnano programmers networked to a single PC

Control Methods:

The ISPnano programmer can be controlled via many different methods including.....



'EDS - Development Mode'

This is a simple yet powerful **'development interface'** supporting generation of 'programming projects' and interactive testing of the target device programming under PC control.



'Production ISP Monitoring Application'

Controls up to 32 programmers from a single PC. Comprehensive data-logging of all programming operations.



'ActiveX control'

Supports direct control of the programmer from any customer Windows application via an 'Equinox Library' of functions.



'Console Application'

Supports both low-level and high-level control from any customer Windows application by shelling to a console application.



ISPnano Series III



ISPnano Series III - ATE



ISPnano Series IV - ATE



ISPnano MUX - Multiplexed Programming System
Available as 2, 4 & 8 channels

Ordering information:

Please select the relevant **'ISPnano programmer'** via our website. Product brochures are available for download.

An **'ams - Magnetic Encoder - Device Library'** supporting ISP programming of ams magnetic encoder devices is also required for each programmer. Order code: **ISPnano-UPG30**

All programmer **'Control methods'** must be purchased separately as **Software Development Kits (SDK's)**.

Equinox Technologies reserves the right to change any information contained within this leaflet without prior notice. E&OE



The Embedded Solutions Company