



Delivery and service overview

The ESYSE business model

Hardware and software as well as services to support device manufacturers in automation technology; especially for upgrading existing or new devices for operation with modern communication systems such as PROFINET, EtherCAT, Ether-Net/IP and many others.

ESYSE uses embedded systems as a technology combined with high flexibility with regard to the requirements, possibilities and wishes of its business partners.

The ESYSE offer ranges from simple consulting and the development of modular components to the development and manufacture of complete devices.

The benefit for device manufacturers

For the equipment manufacturer, the cooperation with ESYSE results in considerable savings in costs and personnel capacity while at the same time greatly shortening the time to market according to the motto:

Buy special know-how as well as development and production capacity "for a limited period" and use the resources freed up by this for the original developments.

Software, hardware and services from ESYSE

1. Industrial Software Development Kit ISDK 4.0

The ISDK4.0 from ESYSE is a powerful, flexible and scalable software toolkit that enables device manufacturers to quickly and easily integrate industrial software into their existing or future devices. **Relevant devices** are motion control systems (speed + positioning) - e.g. for PROFIdrive AC1 to AC6, encoders (integrated or standalone) as well as pumps, valves or IO devices. **Supported device profiles** are PROFIdrive (drives and encoders), CIP (drive, encoder, generic) and CANopen (drive, encoder).

2. Gateways

ESYSE offers gateways for the transition from "classic" protocols such as PROFIBUS, CANopen, Modbus and others to Ethernet-based systems such as PROFINET, Ethernet/IP, Ether-CAT and others.

The gateways are available in different designs and can therefore be easily adapted to the current conditions.

3. Evaluation Boards

Evaluation boards are used in the early phase of a planned development to test design, function and connection technology. ESYSE makes such boards available to its partners in various forms and dimensions.

4. Embedded Module (ESYSE-E200P2)

ESYSE has a large number of pre-developed modules based on the ERTEC 200P controller, which differ in design (square, round), size (down to a 30x50 mm miniature version for operation with a host controller), communication, application and connection technology (LAN, USB, ...).

The design of the modules is so powerful and flexible that they can be completed after a very short development (redesign) time for any defined application. The complete hardware and software design usually takes place within a few weeks. After that, the ready-to-install modules can be used immediately. Upon request, ESYSE supports its customers in the certification process. Some module examples as well as a selection of technical data can be found on page 3.

5. Functional Safety

The hardware and software components can also be designed according to functional safety specifications. ESYSE also supports its customers in the development of individual safety devices.

6. Services

ESYSE sees itself as a **complement to the development departments** of its customers. As a matter of principle, ESYSE pursues a **modular approach** with its range of services and offers its business partners a division of labour approach which is oriented to the possibilities and wishes of the partner. The division of labour ranges from simple consulting and provision of suitable hardware and software to complete development by ESYSE. In many cases, the best solution has proved to be a joint project, which is shown schematically on page 4.

For manufacturing, ESYSE offers both short- and long-term **production capacities without limitation** through partnership with several efficient manufacturers.

ESYSE as Development Partner (Exemplary Project Flow)

Upgrading of an existing automation device (drive, pump, encoder, ...) for Ethernet communication, e. g. on PROFINET

Proportional manpower required
(Experienced proportional values)

ESYSE

Device manufacturer

