

# ESP360

## Transition Module for IP-Comm360

### Adapter Module for

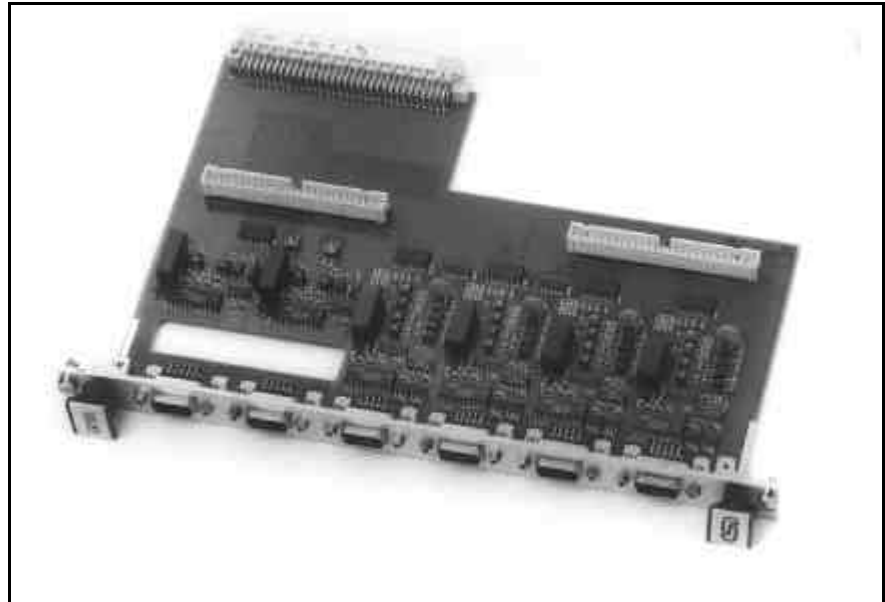
- GreenSpring IP-Comm360
- Electrically isolated
- RS-232, RS-422, RS-485 selectable

### Connectors

- 6 serial interfaces via 15-pole high density DSUB females

### Application

- Front panel wiring in 19" systems
- Communication
- Remote controller
- Data acquisition



### Installation

The adapter board connects the IndustryPack IP-Comm360 to the six serial ports in a front panel via 15-pole DSUB connectors. The connection to the IP is done by two 50-pole ribbon cables with post connectors. To meet the additional power requirements, the ESP360 has to be connected to the P1 VMEbus connector. The ESP360 has to be inserted into the VMEbus slot close to the IP carrier board to enable the correct wiring by the ribbon cables.

### Circuit Protection

Each of the six serial interface at the ESP360 is electrically isolated from the IP-module and from each other. The isolation is realised by optocouplers and DC/DC converters.

### Selectable Interface Types

Four of the serial interfaces of the ESP360-module are connected to the internal serial communication controllers (SCC) of the 68360 at the IP-Comm360. Two of the serial interfaces are connected to the serial management controllers (SMC) of the 68360.

The design of the SCC-interfaces offers three physical layers: RS-232, RS-422 and RS-485. The user can select the layer by software, by solder bridge or by wire bridges in the connector plug.

The two SMC-interfaces offer the same selection technique, but only the choice between RS-232 and RS-422 interfaces is possible. The selected interface type can be read back by software.

### Front Panel

The adapter board is equipped with a standard one slot front panel in 6 U format. As an option an IEEE1101 front panel is available. This front panel is designed for a maximum RF shielding in combination with shielded cases. For a contact to adjacent front panels and for RF shielding the front panel is equipped with high-grade steel contact springs.

### Connectors and interfaces:

Suitable for GreenSpring IP:	IP-Comm360, connection via two 50-pole flat cables
Physical interfaces:	selection between RS-232, RS-422 and RS-485 for channel 1...4 by software, solder bridge or wire bridge in the external connector plug, channel 5 and 6 RS-232 or RS-422 only
Circuit protection:	electrical isolation of each channel against IP-module and against each other
Connectors:	six HD (high density) 15-pole shielded DSUB females on the front panel (connector shield connected to front panel),

### General:

Power supply:	5 V $\pm$ 5%, via VMEbus P1 connector
Ambient temperature:	0...50 °C
Humidity:	max. 90%, non-condensing
Board size:	233 mm x 160 mm
Front panel:	chromated aluminium, 1 slot wide, 6 U high, fixing by 2 neck screws in pressed metal nipples, high-grade steel contact springs for RF shielding

### Order information:

Designation		Order no.
ESP360	transition module for IP-COMM360 incl. standard front panel	V.1129.01
ESP360-FP1101	option: front panel acc. to IEEE1101	V.1129.10
ESP360-FBK50	ribbon cable to IP-module, length $\gg$ 10 cm	V.1129.11
ESP360-ME	English users' manual	V.1129.21