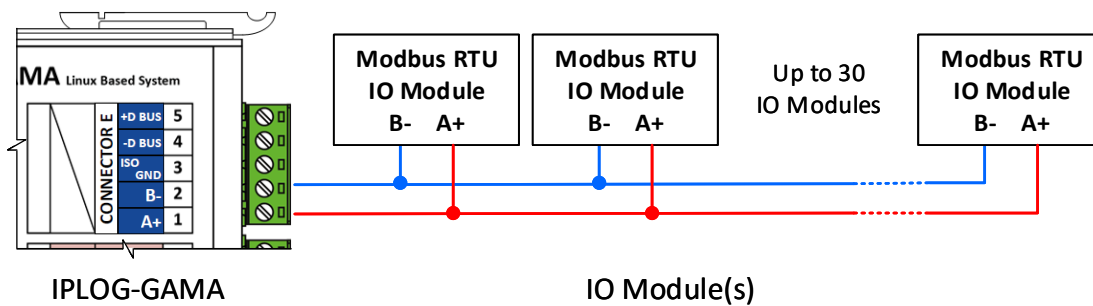


# Connection of IO Modules via MODBUS-RTU Protocol

The IO modules are connected via the RS485 bus with the Modbus-RTU protocol. In the documentation available at [www.metel.eu](http://www.metel.eu) you will find a description of the Modbus registers used to read inputs for output control. When you are connecting multiple IO modules on the bus, each module must first be set to its unique address (ID) on the Modbus bus. Up to 30 IO modules can be connected on one bus. The IO modules can be connected to an IPLOG PLC, to LAN-RING industrial switches or, for example, to USB-RS485 converters.

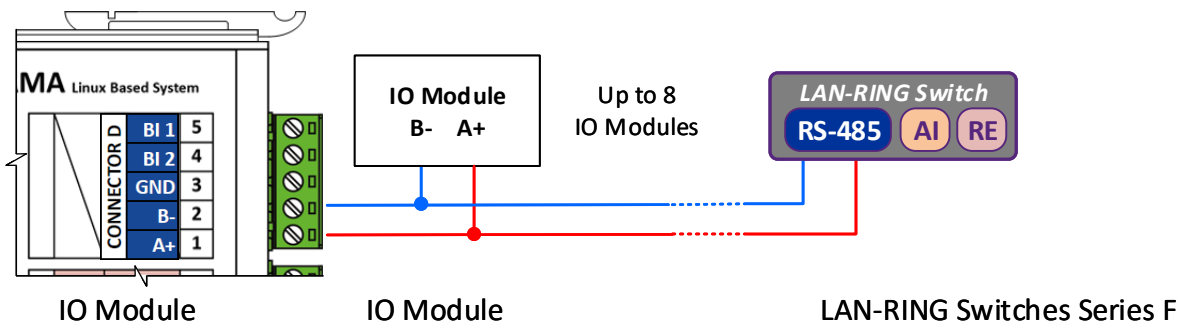
## Connection to PLC IPLOG

The PLC IPLOG runs a user-created program that periodically reads inputs and sets outputs. The control logical options are very wide thanks to the support of FBD, LD, ST and IL programming languages of the IEC61131-3 standard.



## Connection to Industrial Switches LAN-RING Series F

The IO modules are connected to the switches via the RS485 interface. There are two ways to communicate with them. Simple automatic actions can be created by the user directly in the switches with event management. The second option is communication with a remote PLC IPLOG via protocol MODBUS-TCP.



## Connection to USB-RS485 Converter

The computer runs an application that supports the Modbus protocol and reads / writes values to the Modbus registers of IO modules.

