Configure TPLC as a MODBUS gateway

A TPLC system (main module + I/O boards) can be configured as a MODBUS gateway. In this scenario it will not apply any logic but only act as an I/O extension for another system. The system supports MODBUS RTU over RS422 or RS485 with 1 stop bit and speeds of up to 115200bps.

To configure TPLC in MODBUS gateway mode:
1. Open FlashLoader app
2. Connect a serial adapter to the RS232 port on the main module
3. Select the correct port in the app
4. Select the "Remote" option, enter the desired params for address, speed and number of boards
5. Press Write and wait until the configuration is loaded into the main module

When in MODBUS gateway mode, the system responds to the following standard MODBUS RTU commands:

Read discrete inputs (0x02):

This command allows the configured number of inputs to be read starting at address 0.

Write Multiple Coils (0x0f):

This command allows to set all or a subset of the configured outputs.

Read Write Multiple Registers (0x17):

This command allows writing the outputs and reading the inputs in a single transaction, optimizing communication speed on the bus. In this case, discrete IOs are packed as bits in the registers. This command is recommended only if speed is of high importance.