iRidium for Modbus

Description on the web site
Specification

Updated: 30.07.2013

Contents

- 1 Instructions
  - 1.1 Basic Operation of iRidium with Modbus Controllers
  - 1.2 Examples of Communication with Modbus Variables
- 2 Downloads

iRidium for Modbus is a package of tools for creating interfaces and controlling automation system on the basis of Modbus controllers. iRidium enables connection of control panels to the controller in the Master-Slave mode where the control panel is always a Master Client. iRidium allows you to send and receive data about the state of variables on real time basis using Modbus TCP, RTU or ASCII protocols. When working with Modbus TCP it is possible to control the system via the Internet.

> *This section presents instructions for communication with equipment via Modbus TCP, RTU, ASCII protocols.Settings of Modbus commands and channels are similar for these technologies of data transfer. They are presented on the example of the Modbus TCP driver.*

This manual introduces only the standard way of using iRidium for controlling Modbus controllers (without using scripts).

Instructions

Start Your Work with iRidium

Basic Operation of iRidium with Modbus Controllers

1 Principles of Communication of iRidium Control Panels with Modbus
2 Setting Up the Connection to the Modbus-compatible Controller
2.1 Connection to the Controller via Modbus TCP
2.2 Connection to the Controller via Modbus RTU or ASCII
2.3 Connection to the Controller via Modbus RTU or ASCII through TCP/IP Gateway
3 Switching Between the Local and Internet Connection
4 Features of Particular Controllers
4.1 Beckhoff
4.2 OBEH

5 Import of Modbus Commands and Channels
6 Sending Commands and Reading Data by the Modbus protocol
6.1 Creating Commands for Controlling Modbus Variables
6.2 Creating Channels for Receiving and Displaying the Status of Modbus Variables
7 Emulation of Project Work
8 Launching Projects on Control Panels

Examples of Communication with Modbus Variables

1 Writing Data in Coil Registers
1.1 Writing Values in Coil by Button
1.2 Writing Values in Coil by Trigger Button
2 Writing Data in Holding Registers
2.1 Writing Values in Holding Registers by Button
2.2 Writing Values in Holding Registers by Level
2.3 Writing Values in Holding Registers by Trigger Button
2.4 Writing Values in Holding Registers by Up/Down Button
3 Reading Data about the State of Registers
3.1 Setting up Channels for Receiving Data about the State of Registers
3.2 Changing the Item State When Changing the Register Value
3.3 Displaying the Current Register Value in the Item Text Field
4 Peculiar Features of Modbus Controllers
5 Controlling RGB LED Lighting with Color Picker

Downloads

Projects with examples of controlling equipment:

- **Download: iRidium for Modbus (0,9 Mb)**