Click&Go Plus™ User’s Manual

The software described in this manual is furnished under a license agreement and may be used only in accordance with the terms of that agreement.

Copyright Notice

© 2016 Moxa Inc. All rights reserved.

Trademarks

The MOXA logo is a registered trademark of Moxa Inc.
All other trademarks or registered marks in this manual belong to their respective manufacturers.

Disclaimer

Information in this document is subject to change without notice and does not represent a commitment on the part of Moxa.

Moxa provides this document as is, without warranty of any kind, either expressed or implied, including, but not limited to, its particular purpose. Moxa reserves the right to make improvements and/or changes to this manual, or to the products and/or the programs described in this manual, at any time.

Information provided in this manual is intended to be accurate and reliable. However, Moxa assumes no responsibility for its use, or for any infringements on the rights of third parties that may result from its use.

This product might include unintentional technical or typographical errors. Changes are periodically made to the information herein to correct such errors, and these changes are incorporated into new editions of the publication.

Technical Support Contact Information

www.moxa.com/support

<table>
<thead>
<tr>
<th>Moxa Americas</th>
<th>Moxa China (Shanghai office)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toll-free: 1-888-669-2872</td>
<td>Toll-free: 800-820-5036</td>
</tr>
<tr>
<td>Tel: +1-714-528-6777</td>
<td>Tel: +86-21-5258-9955</td>
</tr>
<tr>
<td>Fax: +1-714-528-6778</td>
<td>Fax: +86-21-5258-5505</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Moxa Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tel: +49-89-3 70 03 99-0</td>
</tr>
<tr>
<td>Fax: +49-89-3 70 03 99-99</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Moxa India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tel: +91-80-4172-9088</td>
</tr>
<tr>
<td>Fax: +91-80-4132-1045</td>
</tr>
</tbody>
</table>
# Table of Contents

1. **Overview** ............................................................................................................................... 1-1
   - Click&Go Plus™ Overview ........................................................................................................ 1-2
   - Click&Go plus™ Features .......................................................................................................... 1-2
   - Using Click&Go Plus™ Logic ...................................................................................................... 1-2

2. **Click&Go Plus™ Components** .................................................................................................. 2-1
   - Timer ........................................................................................................................................... 2-2
   - SNMP Trap .................................................................................................................................. 2-3
   - TCP/UDP Message ...................................................................................................................... 2-5
   - Email ........................................................................................................................................... 2-6
     - Server ..................................................................................................................................... 2-6
     - Recipients ............................................................................................................................... 2-7
     - Email Content ......................................................................................................................... 2-8
   - Schedule .................................................................................................................................... 2-10
   - Internal Register ....................................................................................................................... 2-10
   - Remote Action ............................................................................................................................ 2-11
   - CGI Commands ......................................................................................................................... 2-12
     - As Server .............................................................................................................................. 2-12
     - As Client ............................................................................................................................... 2-13
   - SMS (IoLogik 2500-GPRS/HSPA only) ...................................................................................... 2-14
     - As Server .............................................................................................................................. 2-14
     - As Client ............................................................................................................................... 2-15

3. **Click&Go Plus™ Rules** ............................................................................................................. 3-1
   - Click&Go Plus™ Rules ............................................................................................................. 3-2
   - Click&Go Plus Rule Settings ..................................................................................................... 3-2
     - Types of IF Conditions ........................................................................................................... 3-3
     - Types of THEN/ELSE Actions ............................................................................................... 3-5
     - List of THEN/ELSE-Actions .................................................................................................. 3-6

4. **Click&Go Plus™ Simulation** .................................................................................................... 4-1
   - Starting a Simulation .................................................................................................................. 4-2
Moxa’s ioLogik 2500 is a remote I/O device designed for smart monitoring applications over Ethernet and wireless interfaces. With Click&Go Plus™ intelligence built in, the ioLogik 2500 can be configured for simple outputs paired up with simple input triggers, without using a PC controller.

Click&Go Plus™ intelligence allows the ioLogik 2500 to be configured to automatically report I/O events according to user-specified conditions. Simple IF-Then-Else statements are used to specify conditions that are required for certain actions to take place. Up to 8 conditions and 8 actions can be combined in one rule, and up to 48 rules can be defined. Supported actions include sending SNMP traps or TCP/UDP messages to up to 10 hosts at a time.

The following topics are covered in this chapter:

- Click&Go Plus™ Overview
- Click&Go plus™ Features
- Using Click&Go Plus™ Logic
Click&Go Plus™ Overview

Click&Go Plus™ logic can be managed and configured with the IOxpress utility to handle front-end events. IOxpress’s graphical user interface also provides easy access to all status information and ioLogik 2500 settings.

Click&Go plus™ Features

Click&Go Plus Logic has the following key features:

- Easy local logic control using graphical and intuitive IF-Then-Else style constructions
- Up to 48 user-defined rules
- Choice of email, TCP, UDP, and SNMP trap for active I/O messaging
- Customizable message content with dynamic fields for time, date, IP address, and more
- Up to 10 simultaneous IP destinations for TCP/UDP messaging
- Internal register function for remote output control when Click&Go plus is running
- Timer Delay function for timing events
- Configurable interval for time-triggered events

Using Click&Go Plus™ Logic

The following flowchart shows an overview of the Click&Go Plus™ Logic configuration process:

1. Set up I/O Components
2. Create C&G+ Components
3. Design C&G+ Logic Rules
4. Run C&G+ Simulation

More information is available about each of these four topics:

- Setting up I/O Components: See the ioLogik 2500 User’s Manual.
- Creating C&G+ Components: See Chapter 2 of this manual.
- Designing C&G+ Logic Rules: See Chapter 3 of this manual.
- Running C&G+ Simulation: See Chapter 4 of this manual.
Click&Go Plus™ Components

ClickGo Plus™ components can be found in **IOxpress Utility** → **Offline Configuration Management** → **Settings** → **Click&Go Plus**.

Click&Go Plus™ components can be used to specify conditions and actions that are required for certain actions to take place. Up to 8 conditions and 8 actions can be combined in one rule, and you can define up to 48 rules.

The following topics are covered in this chapter:

- **Timer**
- **SNMP Trap**
- **TCP/UDP Message**
- **Email**
  - Server
  - Recipients
  - Email Content
- **Schedule**
- **Internal Register**
- **Remote Action**
- **CGI Commands**
  - As Server
  - As Client
- **SMS (ioLogik 2500-GPRS/HSPA only)**
  - As Server
  - As Client
# Timer

The Timer function allows users to delay an action, trigger an action to run, or repeat an action. A timer is activated by a change of the logic event. After the timed interval has expired, the output will be performed.

The Timer can be used in the following circumstances:

- **If Condition:** Timeout
- **THEN/ELSE Action:** Start / Stop / Restart

## Timer Settings

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Interval (sec(s))</th>
<th>Initial State</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Timer_0</td>
<td>5</td>
<td>Stop</td>
</tr>
</tbody>
</table>

### NOTE

If you use a THEN/ELSE action to Stop / Stop / Restart Timer, the "IF condition" should be an edge-triggered condition. (For example, if you are using the DI as an if condition, then OFF to ON / ON to OFF / Change are all edge-triggered conditions.)

**Timer Settings**

**Name**
The name that will be shown in Click&Go rules.

**Time Interval**
The duration of the timer.

**Initial State**
The initial state of the timer when the ioLogik 2500 starts up.

**Add**
For adding a new timer function.

**Apply**
For changing the setting of an existing timer function.
SNMP Trap

The ioLogik supports SNMP (Simple Network Management Protocol) v1/v2c to allow monitoring of the network and I/O devices with SNMP Network Management software. SNMP Traps can be used for THEN/ELSE actions. It is useful for building automation and telecom applications.

The SNMP Trap function sends an SNMP trap to one or more IP destinations. The specific ID can be any number between 1 and 20. (You may need to consult with your network administrator to determine how trap numbers will be used and defined on your network.)

Enter your desired message in the Content Settings section. Dynamic fields such as time, date, IP address, and I/O status can be inserted in your message by clicking Keyword Lookup. Messages are sent in ASCII. The Timer function allows users to delay an action, trigger an action to run, or repeat an action. A timer is activated by a change of the logic event. After the timed interval has expired, the output will be performed.

**Name**
The name that will be shown in Click&Go rules.

**Content Settings**

**Version**
You can select v1 or v2c.
**Server IP address**
The IP address of SNMP server.

**Server Trap Community**
For setting the trap community.

**Parameter Settings**

**Variable**
You can select the variable that you would like to send by SNMP trap. Up to 3 variables can be selected. After a variable has been enabled, click the "Slot" and "Channel" columns to update the configuration of that variable.

**Select Specific ID**
The specific ID can be set to any number from 01 to 20.

**Content Settings**

**Send as ASCII**
The content can be sent by ASCII mode.

**Content**
The content can be added in the SNMP trap.

**Keyword Lookup**
You can specify keywords related to the ioLogik 2500 device data to be included in the SNMP trap. The device data includes information such as server date, server time, server name, server MAC, LAN IP, Cellular IP, Channel Tag, and Channel Alias Name.

The system RSSI can be determined using the Channel Tag and Channel Alias Name parameters. The RSSI value is applicable only for cellular devices.

```
<Server_Date>
<Server_Time>
<LAN_IP>

<Server_Name>

<Server_MAC>
<Cellular_IP>

Slot-00 Channel Tag
Slot-00 Channel Alias Name
```
TCP/UDP Message

The TCP/UDP Message feature enables you to configure one or more IP addresses of the Message Servers to which Click&Go Plus logic sends generated event messages. Click&Go Plus logic sends the defined active message to all addresses listed.

**Name**
The name that will be shown in Click&Go rules.

**Server Settings**

**Server IP address**
The IP address of TCP/UDP server.

**Message Protocol**
Select the protocol you would like to use. Available protocols: TCP, UDP

**Message Port**
Set the port number the computer uses to communicate with the device. The default TCP/UDP port number is 9000.

**Retry**
Enter the number of connection attempts.

**Interval**
The interval between two retries.
**Timeout**
The timeout for the ioLogik 2500 if it does not receive an ACK from the server.

**Content Settings**

**Send as ASCII/UNICODE/HEX**
The content can be sent by ASCII/UNICODE/HEX mode.

**Content**
The content can be added in the TCP/UDP message.

**Keyword Lookup**
You can specify keywords related to the ioLogik 2500 device data to be included in the SNMP trap. The device data includes information such as server date, server time, server name, server MAC, LAN IP, Cellular IP, Channel Tag, and Channel Alias Name.

The system RSSI can be determined using the Channel Tag and Channel Alias Name parameters. The RSSI value is applicable only for cellular devices.

```
<Server_Date>
<Server_Time>
<LAN_IP>

<Server_Name>
<Server_MAC>
<Cellular_IP>

Slot-00 Channel Tag
Slot-00 Channel Alias Name
```

**Email**
The E-mail function can be used to send customizable emails to one or more mail boxes. The email can be set as a THEN/ELSE action.

**Server**
On the server tab, you can set the email server that the ioLogik 2500 will use to send emails.
**Server Type**
You can choose Gmail or any other mail server as the server type. Default settings for the Gmail server will be configured if you select Gmail as your server type. Settings for all other server types have to be configured manually. Contact your IT administrator for server details.

**Encryption**
Choose how the emails will be encrypted (TLS or N/A).

**Authentication**
Choose how the emails will be authenticated (PLAIN or LOGIN).

**IP (or URL)**
The email server’s IP address or URL.

**Port**
The email server’s port number.

**Timeout**
Timeout for the server connection failures.

**Recipients**
On the recipients tab, you can configure who will receive emails from Click&Go. The recipients must be set before writing the email content.

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MOXA</td>
<td><a href="mailto:MOXA@moxa.com">MOXA@moxa.com</a></td>
</tr>
<tr>
<td>2</td>
<td>MOXA1</td>
<td><a href="mailto:MOXA1@moxa.com">MOXA1@moxa.com</a></td>
</tr>
<tr>
<td>3</td>
<td>MOXA Group (Group)</td>
<td><a href="mailto:MOXA@moxa.com">MOXA@moxa.com</a>, <a href="mailto:MOXA1@moxa.com">MOXA1@moxa.com</a></td>
</tr>
</tbody>
</table>

**Name**
The name of the receiver.

**Email address**
The email address of the recipients.

**Add Email**
Add a Name and Email address of another recipient.

**Add Group**
Add more than two recipients together.
Email Content

Name
The name that will be shown in the Click&Go rules.

Email Information
The subject of the email, and the sender’s name and email address.

Subject
The subject of email.

Sender name
The sender’s name that will be shown in the email.

From
The email address of senders

To
The recipient that the email is being sent to (the email must be listed on the "Recipients Tab")
Content Settings

**Send as ASCII/UNICODE**
Send the email in ASCII or UNICODE format.

**Content**
The content of the email.

**Keyword Lookup**
You can specify keywords related to the ioLogik 2500 device data to be included in the SNMP trap. The device data includes information such as server date, server time, server name, server MAC, LAN IP, Cellular IP, Channel Tag, and Channel Alias Name.

The system RSSI can be determined using the Channel Tag and Channel Alias Name parameters. The RSSI value is applicable only for cellular devices.

```
<Server_Date>
<Server_Time>
<LAN_IP>

<Server_Name>

<Server_MAC>
<Cellular_IP>

Slot-00 Channel Tag
Slot-00 Channel Alias Name
```
Schedule

The Schedule function can be used in an IF condition. It allows users to set a starting point or time period for a task.

For recurring actions, you can select the relevant weekdays. If a time period needs to be defined, specify the settings in the “Range of Recurrence” column. For example, the Schedule function can be used if a pump needs to start at 9:00 PM and stop at 11:00 PM every Monday, Wednesday, and Friday.

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Schedule Name</th>
<th>Periodic0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode</td>
<td>Periodic</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Starts 21:00:00</th>
<th>Ends 22:00:00</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Recurrence Pattern</th>
<th>Recur every 1 week(s) on:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly</td>
<td>Sunday</td>
</tr>
<tr>
<td></td>
<td>Thursday</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Range of Recurrence</th>
<th>Starts on 2015/5/11</th>
<th>Ends after 10 occurrences</th>
</tr>
</thead>
</table>

Internal Register

Internal Register (Integer) is a flag that can be used with Click&Go Plus logic internally or externally. The 48 sets of internal registers can be polled and controlled by SCADA software using standard Modbus/TCP format, or configured to redirect the result of one Click&Go Plus logic to another.

The default value of an internal register is “0”.

<table>
<thead>
<tr>
<th>Internal Register Setting (Unsigned Short)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Float Internal Register Setting (Float)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>9</td>
</tr>
</tbody>
</table>
Remote Action

The Remote Action function can be used to send and receive triggers between several ioLogik 2500 devices.

- The "As Server" function can be used in IF conditions to trigger the local device.
- The "As Client" function can be used in THEN/ELSE actions to trigger a remote device.

NOTE
For "As Server", the device will only be triggered when "Client IP" and "Action ID" match.
CGI Commands

As Server

The ioLogik 2500 will operate as a server. Server settings can be used in Click&Go if conditions → CGI command (Server).

The following URL can be used to trigger the CGI command sever:
http://IP address:Port/action/cg?CGIMOXA=Command String

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CGI_Command_Server_0</td>
</tr>
</tbody>
</table>

Name: CGI_Command_Server_0

Server Settings

Command string

The name that will be shown in the Click&Go rules.

The command string for the CGI command (server). The following URL can be used to trigger the CGI command sever: http://IP address:Port/action/cg?CGIMOXA=Command String
As Client

The ioLogik 2500 will operate as a client. The server settings can be used in Click&Go THEN/ELSE actions → CGI command (Client).

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CGI_Command_0</td>
</tr>
</tbody>
</table>

CGI Command Settings

**GET Method**

The ioLogik 2500 will use the GET method to send CGI commands.


**POST Method**

- **http://** [IP address] [:80] / [path]

Content (application/x-www-form-urlencoded only)

The default strings for sending CGI commands to the ioLogik 2500 are:

**GET Method**

The ioLogik 2500 will use the GET method to send CGI commands.


**IP address/port**

IP address of the CGI command receiver.

**Path**

The path can be self-defined.

**query**

The path can be self-defined.
POST Method
The ioLogik 2500 will use the POST method to send CGI commands.

<table>
<thead>
<tr>
<th>POST Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>http:// [IP address] : 80</td>
</tr>
<tr>
<td>Content (application/x-www-form-urlencoded only)</td>
</tr>
<tr>
<td>Content</td>
</tr>
</tbody>
</table>

**IP address/port**
IP address of the CGI command receiver.

**Path+post content length**
The information for the CGI command receiver.

**Content**
The content of the CGI command.

**SMS (ioLogik 2500-GPRS/HSPA only)**
The Short Message Service function allows the user to configure SMS in detail, including selecting recipients from the phone book, defining the escalation and acknowledgements, and defining SMS content.

There are two tabs: **As Server** and **As Client**.

**As Server**
The ioLogik 2500-GPRS/HSPA can be used as a server to receive command strings send from other cellular devices (such as ioLogik 2500-Cellular devices and mobile phones). SMS commands allow users to use short messages to monitor or control the I/O status of an ioLogik 2500-GPRS/HSPA unit.
As Client

The ioLogik 2500-GPRS/HSPA can be used as a client for sending SMSs to other devices.

Recipient Count
You can choose how many recipients will receive the SMS. Before you can select a specific recipient, you first need to add the recipient’s information in the **Phone Book** (see below).

Enable Escalation Mode
If you select **Enable Escalation Mode**, the SMS will be sent out in the sequence listed in the recipient list, and using the timeout interval. A recipient will stop receiving the SMS alarm when the preset maximum retry loop count is reached, or when one receiver acknowledges receiving the SMS.

Phone Book
Use the **Phone Book** to add, modify, or delete recipient information, which includes Name and Phone No.

**NOTE** If the existing Phone Number of a recipient is changed, click the **Apply** button for all SMS rules related to the recipient.
Content Settings

Enter your desired message in the **Content** column. Dynamic fields, such as time, date, IP address, and I/O status, can be inserted in a message by clicking **Keyword Lookup**. Messages are sent in ASCII format by default, but can be sent in UNICODE format by selecting **Send as UNICODE**, and can be sent in HEX format by selecting the **Send as HEX (separated by ",")**.
Click&Go Plus™ Rules

Click&Go Plus logic was developed by Moxa to provide an easy way to program your ioLogik 2500. In this chapter, we explain how to use Click&Go Plus logic to deploy a remote I/O solution.

The following topics are covered in this chapter:

- Click&Go Plus™ Rules
  - Click&Go Plus Rule Settings
  - Types of IF Conditions
  - Types of THEN/ELSE Actions
  - List of THEN/ELSE-Actions
Click&Go Plus™ Rules

After you finish configuring Click&Go components, you can create Click&Go Plus rules. Click&Go Plus logic provides an easy way to program your ioLogik 2500 product for Smart Ethernet/Wireless Remote I/O operations.

The main Click&Go rules page is shown below.

Click&Go Plus Rule Settings

Click&Go logic uses the IF-THEN-ELSE concept. The device will follow the rules you have programmed to detect the IF conditions and execute THEN/ELSE Actions.
Types of IF Conditions

“If” conditions are categorized into two types: EVENT and COMPARISON. You can find these two categories in the Condition Settings window. If the parameter is not shown (i.e., the space under Type, Module, and Parameter is empty), check to make sure that the Click&Go Plus components have been set. See Chapter 2 for details.

**Trigger Type: Event**
- Supports physical IO and software components (software IO)
- Monitors the result of Boolean type output (e.g., True/False, Enable/Disable, Start/Stop)
- Usually used with “Digital” IO types

**Trigger Type: Comparison**
- Supports physical IO and software components (software IO)
- Monitors the result of numerical output types
- Usually used with “Analog” IO types

**List of IF-Conditions**
The list of functions you can find in Click&Go Plus If conditions
**Trigger Type: Event**
The following functions are listed in "If EVENT" conditions.

<table>
<thead>
<tr>
<th>Parameter Type</th>
<th>Conditions</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>DI</td>
<td>ON/OFF/Change /Change from OFF to ON /Change from ON to OFF</td>
<td></td>
</tr>
<tr>
<td>DO</td>
<td>ON/OFF/Change /Change from OFF to ON /Change from ON to OFF</td>
<td></td>
</tr>
<tr>
<td>Relay</td>
<td>ON/OFF/Change /Change from OFF to ON /Change from ON to OFF</td>
<td></td>
</tr>
<tr>
<td>System Start-Up</td>
<td>TRUE</td>
<td></td>
</tr>
<tr>
<td>Cellular link up</td>
<td>TRUE</td>
<td></td>
</tr>
<tr>
<td>WLAN link up</td>
<td>TRUE</td>
<td></td>
</tr>
<tr>
<td>Modbus Host Connection Timeout</td>
<td>TRUE</td>
<td></td>
</tr>
<tr>
<td>Schedule</td>
<td>TRUE</td>
<td></td>
</tr>
<tr>
<td>Timer</td>
<td>Timeout</td>
<td></td>
</tr>
<tr>
<td>Remote Action (Server)</td>
<td>TRUE</td>
<td></td>
</tr>
<tr>
<td>SMS (Server)</td>
<td>TRUE</td>
<td></td>
</tr>
<tr>
<td>CGI Command (Server)</td>
<td>TRUE</td>
<td></td>
</tr>
<tr>
<td>Serial TAG</td>
<td>TRUE</td>
<td></td>
</tr>
</tbody>
</table>

**Trigger Type: COMPARISION**
The following are functions listed in "If COMPARISION" conditions.

<table>
<thead>
<tr>
<th>Parameter Type</th>
<th>Operator</th>
<th>Second Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI</td>
<td>&lt;, &lt;=, =, &gt;=, &gt;</td>
<td>Constant Percentage Other Data</td>
<td></td>
</tr>
<tr>
<td>Counter</td>
<td>&lt;, &lt;=, =, &gt;=, &gt;</td>
<td>Constant Other Data</td>
<td></td>
</tr>
<tr>
<td>Virtual Channel</td>
<td>&lt;, &lt;=, =, &gt;=, &gt;</td>
<td>Constant Other Data</td>
<td></td>
</tr>
<tr>
<td>Relay Counter (Current)</td>
<td>&lt;, &lt;=, =, &gt;=, &gt;</td>
<td>Constant Other Data</td>
<td>With ioLogik E1214 Expansion module only</td>
</tr>
<tr>
<td>Relay Counter (Total)</td>
<td>&lt;, &lt;=, =, &gt;=, &gt;</td>
<td>Constant Other Data</td>
<td>With ioLogik E1214 Expansion module only</td>
</tr>
<tr>
<td>Input Power Voltage</td>
<td></td>
<td>Constant Other Data</td>
<td>Cellular models only</td>
</tr>
<tr>
<td>Internal Register</td>
<td>&lt;, &lt;=, =, &gt;=, &gt;</td>
<td>Constant Other Data</td>
<td></td>
</tr>
<tr>
<td>Float Internal Register</td>
<td>&lt;, &lt;=, =, &gt;=, &gt;</td>
<td>Constant Other Data</td>
<td></td>
</tr>
<tr>
<td>Serial TAG (Float/DWORD/WORD)</td>
<td>&lt;, &lt;=, =, &gt;=, &gt;</td>
<td>Constant Other Data</td>
<td></td>
</tr>
</tbody>
</table>

The percentage is based on the full-scale range. If the difference between two sampling values exceeds the percentage, the IF condition will be triggered.
Types of THEN/ELSE Actions

THEN/ELSE actions are categorized into two types: ACTION and ACTIVE MESSAGE. You can find these two categories in the action settings window. If the parameter is not shown (i.e., the space under Type, Module, and Parameter is empty), check to make sure that the Click&Go Plus components have been set. See Chapter 2 for details.

Action Type: Action
- Supports physical IO and software components (software IO)
- Sets the result of output to a fixed value or state
- Includes both Digital and Analog IO types

Action Type: Active Message
- Specific types of “Actions” that contain customized content using different protocols
- Sends messages or data packages using different protocols
List of THEN/ELSE-Actions

The list of functions you can find in Click&Go Plus – THEN/ELSE actions.

### Action Type: Action

<table>
<thead>
<tr>
<th>Parameter Type</th>
<th>Actions</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>DO</td>
<td>ON/OFF</td>
<td></td>
</tr>
<tr>
<td>Pulse Output</td>
<td>START/STOP</td>
<td></td>
</tr>
<tr>
<td>Counter</td>
<td>RESET</td>
<td></td>
</tr>
<tr>
<td>Relay Pulse Output</td>
<td>START/STOP</td>
<td></td>
</tr>
<tr>
<td>Relay</td>
<td>ON/OFF</td>
<td></td>
</tr>
<tr>
<td>Relay Counter (Current)</td>
<td>RESET</td>
<td></td>
</tr>
<tr>
<td>Internal Register</td>
<td>SET TO &quot; &quot;</td>
<td></td>
</tr>
<tr>
<td>Float Internal Register</td>
<td>SET TO &quot; &quot;</td>
<td></td>
</tr>
<tr>
<td>Timer</td>
<td>START/STOP/RESTART</td>
<td></td>
</tr>
<tr>
<td>Data Log</td>
<td>START/STOP</td>
<td></td>
</tr>
<tr>
<td>FTP Upload</td>
<td>START/STOP</td>
<td></td>
</tr>
<tr>
<td>Remote Action</td>
<td>Send</td>
<td></td>
</tr>
<tr>
<td>AO</td>
<td>SET TO &quot; &quot;</td>
<td>With ioLogik E1241 Expansion module only</td>
</tr>
</tbody>
</table>

### Action Type: Active Message

<table>
<thead>
<tr>
<th>Parameter Type</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNMP Trap</td>
<td>Send Every “Sec” (0: Send One Time)*</td>
</tr>
<tr>
<td>TCP/UDP Message</td>
<td>Send Every “Sec” (0: Send One Time)*</td>
</tr>
<tr>
<td>E-Mail</td>
<td>Send Every “Sec” (0: Send One Time)*</td>
</tr>
<tr>
<td>SMS</td>
<td>Send Every “Sec” (0: Send One Time)*</td>
</tr>
<tr>
<td>CGI Command</td>
<td>Send Every “Sec” (0: Send One Time)*</td>
</tr>
</tbody>
</table>

*If the “IF condition” is continuously being triggered, the active message will keep sending messages.
Click&Go Plus™ Simulation

Click&Go Plus Simulation is a tool provided for users to simulate the Click&Go plus rules discussed in Chapter 3.

The following topics are covered in this chapter:

- Starting a Simulation
Starting a Simulation

The following two figures show the main pages and simulator window of Click&Go rules. When you click the Click&Go Simulator Tab, the simulator window will pop up.

**Main Window**

**Simulator Window**
Usage

Take the following steps to simulate your Click&Go Plus rules.

1. Set a “Value” for I/O status in advance by clicking the “Value” column.
2. Set “Time for Simulator” to simulate your system time.
3. Click “Run” to start the simulation.
4. While the simulation is running, you can change the value of any I/O status in the simulator window. The result will be shown in the main window.

5. Click **Pause** to temporarily stop a simulation, or click **Stop** to terminate a simulation. For example, if a counter currently has a value of 11, pausing the counter will cause the counter to continue counting from 11 when the simulation resumes. If you click stop, the counter will be reset to the initial counter value.