

# XINTERGY Driver Manual

Swichtec SM20/Sm50 Intergy Mini Power Driver

**POWERWARE**

Intergy SM20/SM50  
Mini Power Systems



## CPKSoft Engineering Process Monitoring and Industrial Automation Software

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# 1. Introduction

CPKSoft Engineering assumes no responsibility for any errors that may appear in this document. If you have any suggestions for improvements or amendments or have found errors in this publication, please notify us.

This driver is included with all unlimited licenses of TAS-HMITalk. It is not sold separately. It requires the TAS-HMITalk ActiveX to work, therefore it cannot be used as a stand-alone driver.

If you use this driver in your applications, you need to include the xintergy.tlk in the set of files that you distribute. This file must be located in the same folder where the hmitalk.ocx file is registered in order to be found by the activex when the applications are executed.

The source-code for the xintergy.tlk driver is available in plain-C language for additional USD 399 if you own a license of TAS-HMITalk 8.04 or higher.

Refer to the following link to visit the xintergy driver page at CPKSoft Engineering website: <http://www.cpksoft.com/tabid/55/ProductID/55/PageIndex/1/Default.aspx>.

Visit this link if you want to see a complete list of drivers that are currently available for TAS-HMITak: <http://www.cpksoft.com/Drivers/tabid/55/Default.aspx>.

Also, refer to this link if you are interested in purchasing a license of the most recent version of TAS-HMITalk: <http://www.cpksoft.com/Products/tabid/54/Default.aspx>.

We welcome your comments about this document. You can reach us by e-mail at [contact @ cpksoft.com](mailto:contact@cpksoft.com).

## 2. Driver details

### 2.1. Driver overview

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XINTERGY driver allows you to connect to the Swichtec SM20/SM50 Intergy Mini Power Systems using the S3P protocol. Communication is performed using a RS-232 port in the PC. Packets are sent at 19200 baud with one start bit, 8 data bits, one stop bit and no parity.

### 2.2. Supported devices

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This driver can communicate with these devices, but is not necessarily limited to this list:  
POWERWARE SWICHTEC Intergy SM20/SM50 Mini Power Systems

## 3. Command list

### 3.1. Connect to Slave

---

**Description of this command:**

Establishes a communication channel between the master PC and the slave.

**Type of data handled by this command:**

Digital Output

**Number of points accepted by this command:**

1.

**Meaning of the DriverP0 parameter:**

Slave address (1-124). Use 0 for a stand-alone device.

**Meaning of the DriverP1 parameter:**

1

### 3.2. Disconnect from Slave

---

**Description of this command:**

Reverts a slave to the disconnected state.

**Type of data handled by this command:**

Digital Output

**Number of points accepted by this command:**

1.

**Meaning of the DriverP0 parameter:**

Slave address (1-124). Use 0 for a stand-alone device.

**Meaning of the DriverP1 parameter:**

0

### 3.3. Read System Voltage

---

**Description of this command:**

Returns the current DC bus voltage.

**Type of data handled by this command:**

Analog Input

**Number of points accepted by this command:**

1.

**Meaning of the DriverP0 parameter:**

Slave address (1-124). Use 0 for a stand-alone device.

**Meaning of the DriverP1 parameter:**

16393

**Meaning of the DriverP2 parameter:**

14

### 3.4. Read Load Current

---

**Description of this command:**

Returns the load current.

**Type of data handled by this command:**

Analog Input

**Number of points accepted by this command:**

1.

**Meaning of the DriverP0 parameter:**

Slave address (1-124). Use 0 for a stand-alone device.

**Meaning of the DriverP1 parameter:**

16392

**Meaning of the DriverP2 parameter:**

14

### 3.5. Read Battery Current

---

**Description of this command:**

Returns the battery current. This is positive for current flowing into the batteries.

**Type of data handled by this command:**

Analog Input

**Number of points accepted by this command:**

1.

**Meaning of the DriverP0 parameter:**

Slave address (1-124). Use 0 for a stand-alone device.

**Meaning of the DriverP1 parameter:**

16394

**Meaning of the DriverP2 parameter:**

14

## 3.6. Read Battery Temperature

---

**Description of this command:**

Returns the battery temperature.

**Type of data handled by this command:**

Analog Input

**Number of points accepted by this command:**

1.

**Meaning of the DriverP0 parameter:**

Slave address (1-124). Use 0 for a stand-alone device.

**Meaning of the DriverP1 parameter:**

16395

**Meaning of the DriverP2 parameter:**

14

## 3.7. Read Manual Equalise

---

**Description of this command:**

Indicates present process state of manual equalise.

**Type of data handled by this command:**

Analog Input

**Number of points accepted by this command:**

1.

**Meaning of the DriverP0 parameter:**

Slave address (1-124). Use 0 for a stand-alone device.

**Meaning of the DriverP1 parameter:**

16420

**Meaning of the DriverP2 parameter:**

5

**Values that are returned:**

430 = process disabled  
431 = process inactive  
432 = process active

## 3.8. Read Periodic Equalise

---

**Description of this command:**

Indicates present process state of periodic equalise.

**Type of data handled by this command:**

Analog Input

**Number of points accepted by this command:**

1.

**Meaning of the DriverP0 parameter:**

Slave address (1-124). Use 0 for a stand-alone device.

**Meaning of the DriverP1 parameter:**

16425

**Meaning of the DriverP2 parameter:**

5

**Values that are returned:**

430 = process disabled  
431 = process inactive  
432 = process active

## 3.9. Read Battery Test

---

**Description of this command:**

Indicates present process state of battery test.

**Type of data handled by this command:**

Analog Input

**Number of points accepted by this command:**

1.

**Meaning of the DriverP0 parameter:**

Slave address (1-124). Use 0 for a stand-alone device.

**Meaning of the DriverP1 parameter:**

16439

**Meaning of the DriverP2 parameter:**

5

**Values that are returned:**

430 = process disabled

431 = process inactive

432 = process active

## 3.10. Read Alarm State

---

**Description of this command:**

Represents the current state of the system alarm.

**Type of data handled by this command:**

Analog Input

**Number of points accepted by this command:**

1.

**Meaning of the DriverP0 parameter:**

Slave address (1-124). Use 0 for a stand-alone device.

**Meaning of the DriverP1 parameter:**

16466

**Meaning of the DriverP2 parameter:**

20

**Meaning of the DriverP3 parameter:**

Alarm Index

**Values that are returned:**

1 = alarm inactive

2 = alarm active

## 3.11. Read Rectifier Urgent Alarm

---

**Description of this command:**

Set to alarm active if there is presently an urgent rectifier alarm.

**Type of data handled by this command:**

Analog Input

**Number of points accepted by this command:**

1.

**Meaning of the DriverP0 parameter:**

Slave address (1-124). Use 0 for a stand-alone device.

**Meaning of the DriverP1 parameter:**

16467

**Meaning of the DriverP2 parameter:**

5

**Values that are returned:**

1 = alarm inactive

2 = alarm active

## 3.12. Read Rectifier Non Urgent Alarm

---

**Description of this command:**

Set to alarm active if there is presently an non-urgent rectifier alarm.

**Type of data handled by this command:**

Analog Input

**Number of points accepted by this command:**

1.

**Meaning of the DriverP0 parameter:**

Slave address (1-124). Use 0 for a stand-alone device.

**Meaning of the DriverP1 parameter:**

16468

**Meaning of the DriverP2 parameter:**

5

**Values that are returned:**

1 = alarm inactive

2 = alarm active

## 4. Appendices

### 4.1. Error messages

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The following list shows all the possible error messages that can be returned by the protocol driver during a failed communication in the 'DriverStatus' property.

This list does not include some error messages that can be returned by the activex component while attempting to establish a connection.

- [1005] DRIVER (Internal): Invalid driver stage
- [1300] PROTOCOL (Timeout): No answer
- [1421] PROTOCOL (Format): Negative acknowledge received from device
- [1433] PROTOCOL (Format): Validation error in device response
- [2001] CONFIG (DataType): Analog outputs are not supported by this driver
- [2002] CONFIG (DataType): Digital inputs are not supported by this driver
- [3009] CONFIG (P0): Invalid device address (0-124)
- [3510] CONFIG (P1): Invalid command (0 or 1 only)

### 4.2. Keywords list

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The following list shows a set of words directly related to this driver.

"Intergy, Mini, Power, POWERWARE, SM20, SM50, SWICHTEC, Systems".