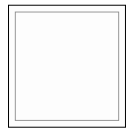




# The Hitzinger Driver

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The Hitzinger driver interfaces to a Hitzinger POWERCON power control system. The driver provides read access to variables in the controller, using their data block/word address, and the value can be decoded using various methods. Available for Commander and ObSys.

This document relates to Hitzinger driver version 1.0

Please read the *Commander Manual* or *ObSys Manual* alongside this document, available from [www.northbt.com](http://www.northbt.com)

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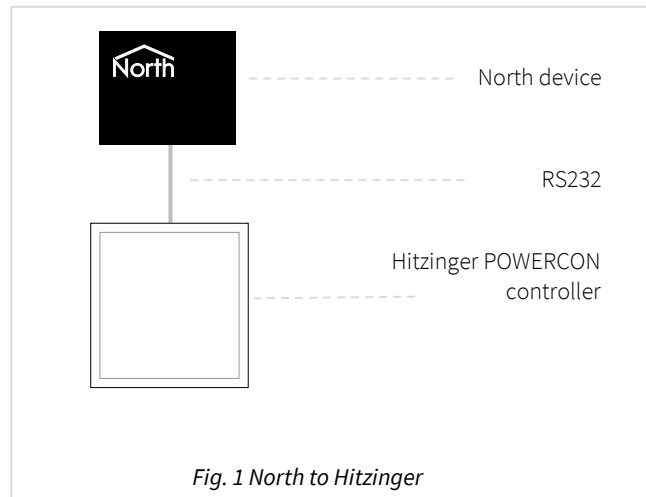
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# Purpose of the Hitzinger Driver

The Hitzinger driver allows North to interface with a Hitzinger POWERCON power control system. The driver provides read access to variables in the controller using their data block/word address, and the value can be decoded using various methods.

The Hitzinger system is modular and can be equipped with 3-phase and 1-phase measuring systems for voltage and current, and I/O modules connected via a CAN bus interface.

The driver connects to a Hitzinger POWERCON supporting the HTZ3964R protocol, via an RS232 connection (Fig. 1).



## Equipment

Hitzinger POWERCON controllers supporting protocol HTZ3964R are compatible with the driver.

## Values

A Hitzinger POWERCON controller contains a table of variables, read using a data-block data-word address.

The use of these variables and the values available depends on the model of controller.

## Prerequisites

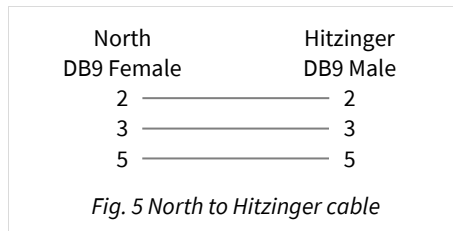
A Hitzinger controller contains variables that can be read and decoded in various ways. Therefore it is important to determine the model of controller, what variables are available, and how these are decoded. Contact the installer or Hitzinger system for this information.

# Using the Driver

On ObSys, the Hitzinger driver is pre-installed. On Commander, the driver is available to download in the file 'Bank15 Hitzinger.cdm'. On all of these North devices, you can use the driver to create an interface to Hitzinger. Once started, you will need to set up the driver before it can communicate with the Hitzinger system.

## Making the Cable

Using the RS232 cable specification (Fig. 2), connect the North Device COM port to the Hitzinger 'RS232' port. Connector types at each end of the cable are shown.



The maximum RS232 cable length is 15m and should be as short possible.

Cables are available from North, order code CABLE/HITZINGER/DB9.

## Starting the Interface

- 📖 To start an interface using the Hitzinger driver, follow these steps:
  - **Start Engineering** your North device using ObSys
  - Navigate to **Configuration, Interfaces**, and set an unused **Interface** to 'Hitzinger' to start the interface
  - Navigate to the top-level of your North device, then rescan it

The driver setup object (Mc), labelled **Hitzinger Setup**, should now be available. If this object is not available, check an interface licence is available and the driver is installed.

## Setting up the Driver

- 📖 To set up the driver, follow these steps:
  - Navigate to the **Hitzinger Setup** object (Mc). For example, if you started interface 1 with the driver earlier, then the object reference will be 'M1'
  - Set the **COM Port** (RS.COM) to select which serial port on the North device is connected to the Hitzinger device

# Object Specifications

Once an interface is started, one or more extra objects become available within the top-level object of the device. As with all North objects, each of these extra objects may contain sub-objects, (and each of these may contain sub-objects, and so on) - the whole object structure being a multi-layer hierarchy. It is possible to navigate around the objects using the ObSys Engineering Software.

Each object is specified below, along with its sub-objects.

## Example Object Reference

An example of a reference to an object in the same device: the Hitzinger System (S1) contains DataBlock 1 (B1). This object contains DataWord 0 (W0), which itself contains a Value (V). Therefore, the complete object reference is 'S1.B1.W0.V'.

An example of a reference to an object in a different device: the IP network object (IP) contains Default Commander object (CDIP), which contains the object above (S1.B1.W0.V) – therefore the complete object reference is 'IP.CDIP.S1.B1.W0.V'.

## Device Top-Level Objects

When an interface is started using the Hitzinger driver, the objects below become available within the top-level object of the device. For example, if interface 1 is started, then the object references 'M1' and 'S1' become available.

Description	Reference	Type
<b>Hitzinger Setup</b> Set up the Hitzinger driver, started on interface <i>c</i> ( <i>c</i> is the interface number)	Mc	Fixed Container: On the Commander platform this will be <i>[CDM v20\Hitzinger v10]</i> On the ObSys platform this will be <i>[OSM v20\Hitzinger v10]</i>
<b>Hitzinger System</b> Access Hitzinger system connected to interface <i>c</i> ( <i>c</i> is the interface number)	Sc	Fixed Container: <i>[Hitzinger v10]</i>

# Hitzinger Driver Setup

Object Type: *[OSM v20\Hitzinger v10]*

Object Type: *[CDM v20\Hitzinger v10]*

The Hitzinger driver contains the following objects:

Description	Reference	Type
<b>RS232 COM Port</b>	RS.COM	Obj\Num; 1..8; Adjustable
<b>System Label</b> Label displayed when scanning the system	DL	Obj\Text: max. 20 chars; Adjustable

# Hitzing System

Object Type: *[Hitzing v10/System]*

The Hitzing system contains 15 Data Blocks.

Description	Reference	Type
<b>DataBlock <math>x</math></b> The DataBlock number, $x$ , is in the range 1...15	B $x$	Fixed container: <i>[Hitzing v10/Block]</i>

## DataBlock

Object Type: *[Hitzing v10/Block]*

A DataBlock object contains up to 80 Data Words.

Description	Reference	Type
<b>DataWord <math>y</math></b> The DataWord number, $y$ , is in the range 0...79	W $y$	Fixed container: <i>[Hitzing v10/Word]</i>

## DataWord

Object Type: *[Hitzing v10/Word]*

A DataWord object contains a single variable with a 16-bit value from the Hitzing controller. The variable's use will depend on the model of controller.

Decode the value using one of the objects available:

Description	Reference	Type
<b>Value</b> The raw 16-bit integer value	V	Obj\Num; Range: 0...65535
<b>Value multiplied by <math>a</math></b> The raw value multiplied by constant $a$	Ma	Obj\Num
<b>Value divided by <math>b</math></b> The raw value divided by constant $a$	Db	Obj\Float
<b>Bit <math>c</math></b> Bit $c$ of the raw value, where $c$ is in the range 0...15	Bc	Obj\NoYes

# Driver Versions

Version	Build Date	Details
1.0	17/09/2003	Driver released
1.0	04/11/2004	Driver released for ObServer
1.0	06/04/2016	Driver released for Commander

## Next Steps...

If you require help, contact support on 01273 694422 or visit [www.northbt.com/support](http://www.northbt.com/support)



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