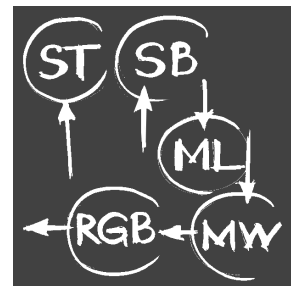


VISONIK®

Information points

Function sheet

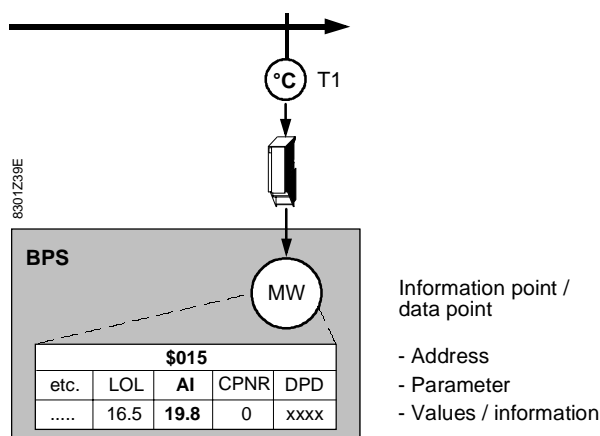


In building automation and control, information points represent the data sources and data sinks of the related process variables. Information points are identified by an address and may contain one or several items of information. The term "information point" in building automation and control is synonymous with "data point".

Use

Example for an information point

The illustration below shows an example for a VISONIK information point. All information in the data point of type MW under the technical address \$015 in the process image of the BPS automation station is available for the basic function MEASURING with temperature sensor T1:



Information

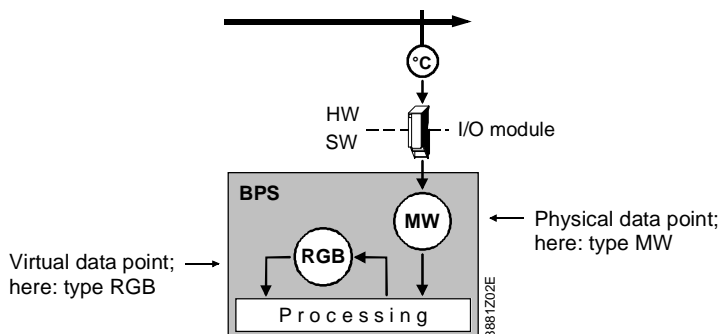
The smallest entity containing a statement on the process variable is considered one item of information. In VISONIK data points, the individual items of information are contained in the various parameters in the form of values. For the above example:

Parameter	Information
DPD	Present raw measured value of sensor T1
CPNR	Conversion set no.; here: 0 for standard conversion to sensor Ni1000
AI	Analogue Input = Present, converted measured value in °C; here: 19.8, also main value for this information point.
LOL	Assigned lower limit value; here: 16.5

Types of information points

Physical and virtual points

In building automation and control, we primarily differentiate between physical and virtual information points as shown in the following illustration based on two VISONIK data points:



Definition and examples

Physical and virtual data or information points are defined as follows:

Designation	Definition/Example
Physical information points	<p>Physical information points have transmitters in the plant. The information is exchanged via I/O modules which represent the interface between hardware and software. For this reason, VISONIK has named them "I/O module points".</p> <p>Example above: Measured value (MW) with temperature sensor in the plant. The latter provides "raw measured value" information. Compare the previous page.</p> <p><i>Note:</i> Physical information points are also called real information points.</p>
Virtual information points	<p>Virtual information points are software points or software data blocks. They execute either logical or arithmetic operations such as open and closed loop control, optimization and communication functions. They are not connected directly to the I/O modules, but they can gather information from I/O module points and assign calculated values to them (processing).</p> <p>Example above: Controller block (RGB) with setpoint, controller parameters, etc.</p> <p><i>Note:</i> Virtual information points sometimes are also referred to as fictitious information points.</p>

Fictitious information points

In VISONIK, a fictitious information point is a special type of virtual data point. By setting a physical data point to "fictitious", the data point becomes a quasi-virtual data point whose main value can be changed in terms of software. Application example: Simulation of a measured value.

Information list and data point list

It is best to compile all information points of a project in a single list to serve as:

- the basis for engineering, e.g. in the form of an information list containing all inputs and outputs, basic and processing functions as per VDI 3814 (German standard), part 2.
- the engineering result in the form of a data point list with the associated project and system-specific information on each point.

Additional information

Refer to the following documents for more information on this topic:

Document No.	Title
CM2N8882E	I/O module points
CM2B8301E	BPS User's Guide