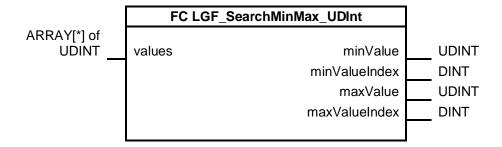
# LGF\_SearchMinMax\_UDInt

## **Short description**

This function block searches, in an array of the data type UDINT, for the maximum and minimum value and the respective index in the array.

#### **Block**



## Input/output parameters (InOut)

Parameters	Data type	Description
values	ARRAY[*] of UDINT	Array in whose fields the maximum and minimum are searched.

## **Output parameters**

Parameters	Data type	Description
minValue	UDINT	Smallest found value.
minValueIndex	DINT	Start index of the array plus minArrayIndex results in the array index of the smallest value. The index starts with 0.
maxValue	UDINT	Largest found value.
maxValueIndex	DINT	Start index of the array plus maxArrayIndex results in the array index of the largest value. The index starts with 0.

#### Principle of operation

An array of any size is connected via the "values" input. The elements are then compared in turn. The smallest and largest values, as well as their corresponding index are output to the array.

**Note** 

If there are several identical min. or max. values, the index of the first min. or max. value is output.

## **Further information on libraries in TIA Portal:**

- Topic page libraries
   https://support.industry.siemens.com/cs/ww/en/view/109738702
- Guideline on Library Handling
   https://support.industry.siemens.com/cs/ww/en/view/109747503
- Programming Guideline for S7-1200/1500 in chapter "Libraries" https://support.industry.siemens.com/cs/ww/en/view/81318674
- Programming Styleguide
   https://support.industry.siemens.com/cs/ww/en/view/81318674