

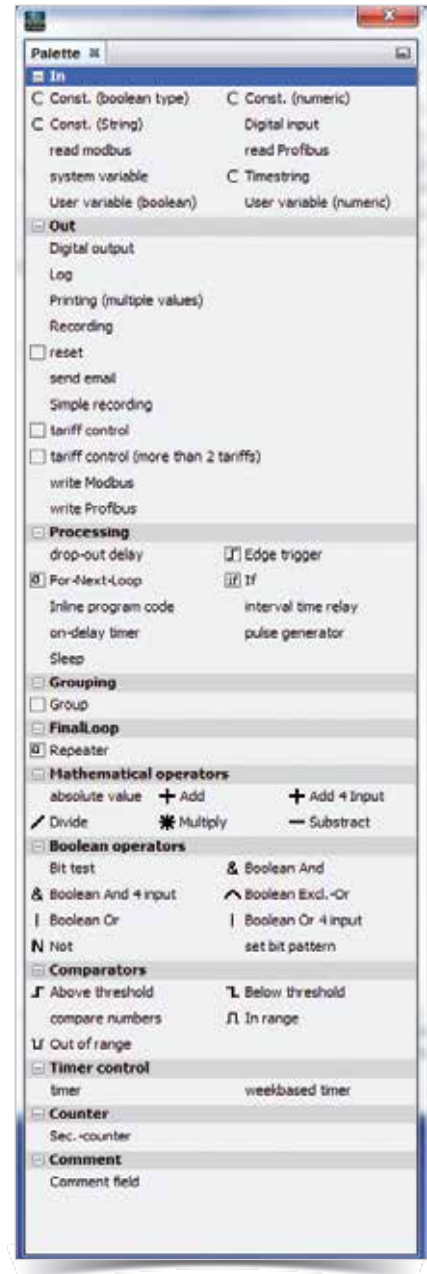
Manifold programming options

- Special programming / script language for the measurement devices UMG 604-PRO / UMG 605-PRO / UMG 509-PRO and UMG 512-PRO
- The user is no longer restricted to the functionalities integrated in the measurement device, but rather the device can be expanded to suit the individual's requirements
- Graphical programming supports the creation and configuration of mathematical functions and logical links
- The devices' own digital outputs can be set
- Digital inputs can be easily evaluated
- The processing and writing of registers belonging to external devices can be implemented via the Modbus
- Free configuration of threshold value infringements, timer functions or recording of special values can be implemented
- Programs created can be stored as files or transferred directly to the measurement device
- There are 7 memory spaces available, each with 128 kByte, for the saving of the programs
- Simultaneous operation of these 7 programs possible
- User-friendly, graphical programming
- Free programming of the Jasic® source code by the user

```

1 SEN Storage für selected View, 0View,1IF BT,2F BT, 3 0
2 SEN Low Mod = View A
3 SEN High Mod = View B
4 global (INT, _sel_selectedView,1,0,"")
5 SEN Same Selection Category
6 global (FLOAT, _sel_category,0,0,"")
7 SEN Storage für price für effective energy BT
8 global (FLOAT, _sel_effEnergy,0,0,"Cost/kWh")
9 SEN Storage für price für effective energy BT
10 global (FLOAT, _sel_effEnergy,0,0,"Cost/kWh")
11 SEN Storage für price für reactive energy
12 global (FLOAT, _sel_reactiveEnergy,0,0,"Cost/kWh")
13 SEN Makes LC device displayed and printed.
14 global (FLOAT, _sel_madePrint,0,0,"")
15 SEN In-Box reset
16 global (FLOAT, _sel_reset(0-30),0,0,"")
17 SEN Bus devices, can't be changed after device starts.
18 global (INT, _sel_ModbusID,1,0,"")
19 SEN Da den Benutzer über Fehler bei Last der zu informieren
20 global (INT, _sel_load_err_text,0,0,"")
21 SEN Deamonmod
22 global (INT, _sel_DeamonMod,0,0,"")
23 SEN ModbusID Wert für Abfrageumfang des UMG103 Messwerte 2k = 4096
24 global (FLOAT, _sel_sel_UMG103,0,0,"")
25 SEN Modbus ID IDG installiert
26 global (FLOAT, _sel_installed_IDG,1,0,"")
    
```

Fig.: Jasic® source code

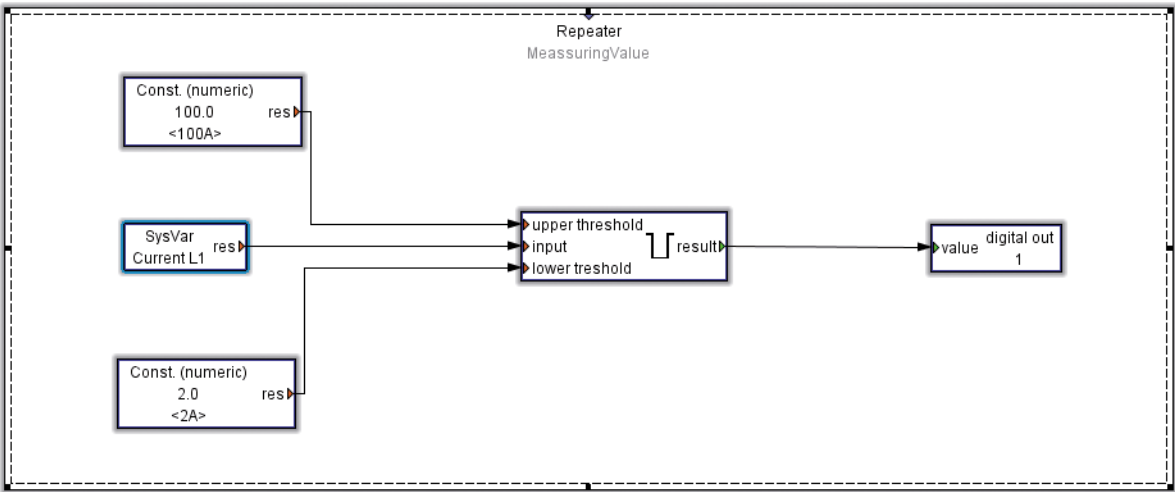


Graphical programming: Examples

Example of threshold value monitoring (comparator)

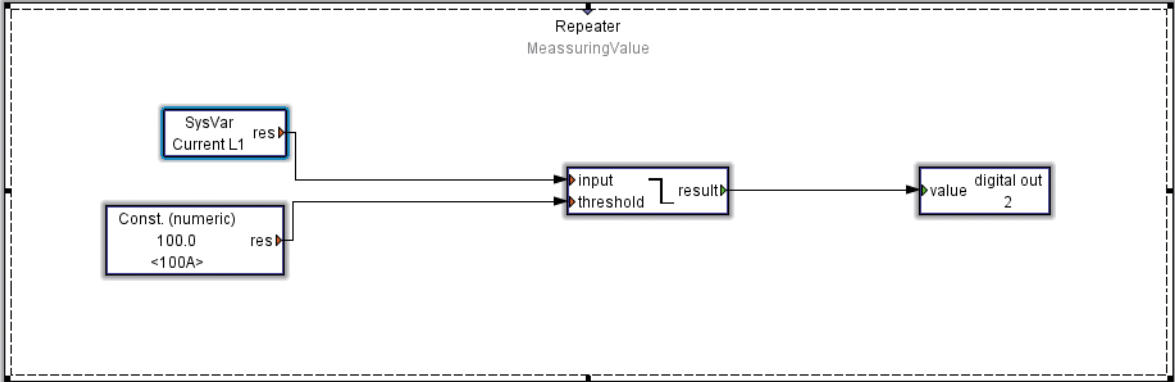
Example 1

- Monitoring of current L1: Determination of the threshold value by means of constants, lower level 2 A, upper level 100 A
- Digital output 1 signals the exceedance of the predefined values



Example 2

- Works with only one lower threshold (in this case 100 A)
- In the event of the current dropping below 100 A, digital output 2 will be activated



Example 3

- An email will be sent in the event of the value dropping below the predefined setting
- In this example the email will be sent with an under-voltage of < 200 V in phases L1, L2 or L3
- Additional information: Voltage values from the 3 phases at the time of the undervoltage

