# PROGRAM DESCRIPTION
# G4

## Program: G4MI_1.8.126.0


Program for Max/Min function

This description is valid for:

**G4 Weighing Instrument** with application program **1.8.126.0**

See also the following descriptions

**G4 Multi Channel Weighing Instrument** Program version 1.8.0.0
**Technical Manual PM/DT/HE** (www.vishaypg.com/doc?35209)
**G4 Multi Channel Weighing Instrument** Program version 1.7.0.0
**Operating instructions, Quick installation PM/DT/HE** (www.vishaypg.com/doc?35178)

If these descriptions in any case are contradictory, this description is valid.

**Special Program options:**
To get the functionality described below the following program option has to be activated.
*13: Max/Min Function*: Option for Max/Min values

## Function

This special program includes a Max/Min and Hold function. The functions works on gross and net mode.

## General

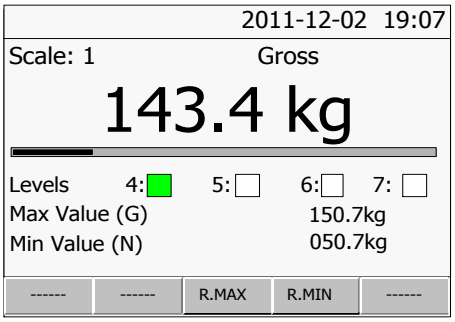
The Max and Min values can be shown on the information lines, sent to an analogue - output, printed, or it can also be fetched by serial communication.

## Operation

The G4 will always display the HIGHEST (Max) and LOWEST (Min) value and keep it even if the actual gross or net weight is decreasing (Max) or increasing (Min).

If the measured Max value is increasing again and became higher then the displayed Max value, the new value is used as Max value.

If the measured Min value is decreasing again and became lower then the displayed Min value, then the new value is used as Min value.




**Max/Min Values on Information lines**
With four new set-up parameters it is possible to configure the instrument to display Max/Min values on the information lines.

Max value for displayed scale is reset with ’R.MAX’. Min value for displayed scale is reset with ‘R.MIN’.

# Parameters

## Menu ‘General’

### Info Line 1 Mode

| | |
|---|---|
| Max Value Gross<br>Max Value Net<br>Min Value Gross<br>Min Value Net | **New choices:**<br>**Max Value Gross*:*** *The max gross value of the shown scale is presented on the first info. line*<br>**Max Value Net*:*** *The max net value of the shown scale is presented on the first info. line*<br>**Min Value Gross*:*** *The min gross value of the shown scale is presented on the first info. line*<br>**Min Value Net*:*** *The min net value of the shown scale is presented on the first info. line* |

### Info Line 2 Mode

| | |
|---|---|
| Max Value Gross<br>Max Value Net<br>Min Value Gross<br>Min Value Net | **New choices**<br>Defines the mode of the second information line on the 1 scale screen on the graphical display.<br>See parameter ‘Info Line 1 Mode’ for details |

## Menu ‘Scale 1 - Scale 8’

### 1:Measurement Unit

| | |
|---|---|
| mm | **New choice** |

## Menus ‘Inputs Slot 1’ - ‘Inputs Slot 6’

### Input 11 Use (- Input 18 Use)

| | |
|---|---|
| Reset Max (G)<br>Reset Max (N)<br>Reset Min (G)<br>Reset Min (N)<br>Reset All | **New choices**<br>***Reset Max (G):*** *Input used to reset max gross value to actual gross weight.*<br>***Reset Max (N):*** *Input used to reset max net value to actual net weight.*<br>***Reset Min (G):*** *Input used to reset min gross value to actual gross weight.*<br>***Reset Min (N):*** *Input used to reset min net value to actual net weight.*<br>***Reset All:*** *Input used to reset all Max/Min/Gross/Net values on all scales.* |

### Input 11 Scale (- Input 18 Scale)

| | |
|---|---|
| 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br><1> | ***1:*** *Scale number 1 uses the input.*<br>***2:*** *Scale number 2 uses the input.*<br>….<br>***8:*** *Scale number 8 uses the input.*<br>Note: this parameter is only shown if parameter ‘Input 11 source’ is **New choices:** Reset Max (G), Reset Max (N), Reset Min (G), Reset Min (N) |

## Menu ‘Analog Outputs’

**AOUT 1 - 4 Source**

| | |
|---|---|
| Max Value Gross | **New choices** |
| Max Value Net | ***Max Value Gross:*** *The output represents max gross value.* |
| Min Value Gross | ***Max Value Net:*** *The output represents max net value.* |
| Min Value Net | ***Min Value Gross:*** *The output represents min gross value.* |
| | ***Min Value Net:*** *The output represents min net value.* |

## Menu ‘Serial Com.’

**COM1 - 2:Print Pos. 1 - 4**

| | |
|---|---|
| Max Value Gross | **New choices** |
| Max Value Net | ***Max Value Gross:*** *The value of the max gross value is printed.* |
| Min Value Gross | ***Max Value Net:*** *The value of the max net value is printed.* |
| Min Value Net | ***Min Value Gross:*** *The value of the min gross value is printed* |
| | ***Min Value Net:*** *The value of the min net value is printed.* |

## Print examples

Print Pos. 1 = Max Value Gross  Print Pos. 2 = Max Value Net

Print Pos. 3 = Min Value Gross  Print Pos. 4 = Min Value Net

Linefeeds = 2

| | | | | |
|---|---|---|---|---|
| 1:+G | 457.6 kg | 1:+N | 289.4 kg | (Scale 1) |
| 1:-G | 0.5 kg | 1:-N | -0.0 kg | |
| 2:+G | 457.9 kg | 2:+N | 345.6 kg | (Scale 2) |
| 2:-G | -0.2 kg | 2:-N | -0.2 kg | |

## New Modbus registers

| Data type: Integer | Data type: float (2 reg./value) | Explanation | R/W |
|---|---|---|---|
| 41700 (3 reg) | 45600 | Scale 1: Max Gross weight | R |
| 41703 (3 reg) | 45602 | Scale 1: Max Net weight | R |
| 41706 (3 reg) | 45604 | Scale 1: Min Gross weight | R |
| 41709 (3 reg) | 45606 | Scale 1: Min Net weight | R |
| | | | |
| 41712 (3 reg) | 45608 | Scale 2: Max Gross weight | R |
| 41715 (3 reg) | 45610 | Scale 2: Max Net weight | R |
| 41718 (3 reg) | 45612 | Scale 2: Min Gross weight | R |
| 41721 (3 reg) | 45614 | Scale 2: Min Net weight | R |
| | | | |
| 41724 (3 reg) | 45616 | Scale 3: Max Gross weight | R |
| 41727 (3 reg) | 45618 | Scale 3: Max Net weight | R |
| 41730 (3 reg) | 45620 | Scale 3: Min Gross weight | R |
| 41733 (3 reg) | 45622 | Scale 3: Min Net weight | R |
| | | | |
| 41736 (3 reg) | 45624 | Scale 4: Max Gross weight | R |
| 41739 (3 reg) | 45626 | Scale 4: Max Net weight | R |
| 41742 (3 reg) | 45628 | Scale 4: Min Gross weight | R |
| 41745 (3 reg) | 45630 | Scale 4: Min Net weight | R |
| | | | |
| 41748 (3 reg) | 45632 | Scale 5: Max Gross weight | R |
| 41751 (3 reg) | 45634 | Scale 5: Max Net weight | R |
| 41754 (3 reg) | 45636 | Scale 5: Min Gross weight | R |
| 41757 (3 reg) | 45638 | Scale 5: Min Net weight | R |
| | | | |
| 41760 (3 reg) | 45640 | Scale 6: Max Gross weight | R |
| 41763 (3 reg) | 45642 | Scale 6: Max Net weight | R |
| 41766 (3 reg) | 45644 | Scale 6: Min Gross weight | R |
| 41769 (3 reg) | 45646 | Scale 6: Min Net weight | R |
| | | | |

| Data type: Integer | Data type: float (2 reg./value) | Explanation | R/W |
|---|---|---|---|
| 41772 (3 reg) | 45648 | Scale 7: Max Gross weight | R |
| 41775 (3 reg) | 45650 | Scale 7: Max Net weight | R |
| 41778 (3 reg) | 45652 | Scale 7: Min Gross weight | R |
| 41781 (3 reg) | 45654 | Scale 7: Min Net weight | R |
| | | | |
| 41784 (3 reg) | 45656 | Scale 8: Max Gross weight | R |
| 41787 (3 reg) | 45658 | Scale 8: Max Net weight | R |
| 41790 (3 reg) | 45660 | Scale 8: Min Gross weight | R |
| 41793 (3 reg) | 45662 | Scale 8: Min Net weight | R |
| | | | |

## Command register

**New Commands**

| Cmd | Action activated in instrument | Description |
|---|---|---|
| 217 | Scale 1: Reset Max Gross Value | *Used to reset max gross value to actual gross weight* |
| 218 | Scale 1: Reset Max Net Value | *Used to reset max net value to actual net weight* |
| 219 | Scale 1: Reset Min Gross Value | *Used to reset min gross value to actual gross weight* |
| 220 | Scale 1: Reset Min Net Value | *Used to reset min net value to actual net weight* |
| | | |
| 221 | Scale 2: Reset Max Gross Value | *Used to reset max gross value to actual gross weight* |
| 222 | Scale 2: Reset Max Net Value | *Used to reset max net value to actual net weight* |
| 223 | Scale 2: Reset Min Gross Value | *Used to reset min gross value to actual gross weight* |
| 224 | Scale 2: Reset Min Net Value | *Used to reset min net value to actual net weight* |
| | | |
| 225 | Scale 3: Reset Max Gross Value | *Used to reset max gross value to actual gross weight* |
| 226 | Scale 3: Reset Max Net Value | *Used to reset max net value to actual net weight* |
| 227 | Scale 3: Reset Min Gross Value | *Used to reset min gross value to actual gross weight* |
| 228 | Scale 3: Reset Min Net Value | *Used to reset min net value to actual net weight* |
| | | |
| 229 | Scale 4: Reset Max Gross Value | *Used to reset max gross value to actual gross weight* |
| 230 | Scale 4: Reset Max Net Value | *Used to reset max net value to actual net weight* |
| 231 | Scale 4: Reset Min Gross Value | *Used to reset min gross value to actual gross weight* |
| 232 | Scale 4: Reset Min Net Value | *Used to reset min net value to actual net weight* |
| | | |
| | | |
| | | |
| | | |
| 233 | Scale 5: Reset Max Gross Value | *Used to reset max gross value to actual gross weight* |

| Cmd | Action activated in instrument | Description |
|---|---|---|
| 234 | Scale 5: Reset Max Net Value | *Used to reset max net value to actual net weight* |
| 235 | Scale 5: Reset Min Gross Value | *Used to reset min gross value to actual gross weight* |
| 236 | Scale 5: Reset Min Net Value | *Used to reset min net value to actual net weight* |
| | | |
| 237 | Scale 6: Reset Max Gross Value | *Used to reset max gross value to actual gross weight* |
| 238 | Scale 6: Reset Max Net Value | *Used to reset max net value to actual net weight* |
| 239 | Scale 6: Reset Min Gross Value | *Used to reset min gross value to actual gross weight* |
| 240 | Scale 6: Reset Min Net Value | *Used to reset min net value to actual net weight* |
| | | |
| 241 | Scale 7: Reset Max Gross Value | *Used to reset max gross value to actual gross weight* |
| 242 | Scale 7: Reset Max Net Value | *Used to reset max net value to actual net weight* |
| 243 | Scale 7: Reset Min Gross Value | *Used to reset min gross value to actual gross weight* |
| 244 | Scale 7: Reset Min Net Value | *Used to reset min net value to actual net weight* |
| | | |
| 245 | Scale 8: Reset Max Gross Value | *Used to reset max gross value to actual gross weight* |
| 246 | Scale 8: Reset Max Net Value | *Used to reset max net value to actual net weight* |
| 247 | Scale 8: Reset Min Gross Value | *Used to reset min gross value to actual gross weight* |
| 248 | Scale 8: Reset Min Net Value | *Used to reset min net value to actual net weight* |
| | | |
| | | |
| 249 | Reset All | *Used to reset all Max/Min/Gross/Net values on all scales.* |
| | | |
| | | |

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