

### Quick Start Guide for VisiFirm Optical DO Sensor with FLXA402 Analyzer

Hamilton VisiFirm Optical DO Sensor / FLXA402 4-Wire Analyzer

# Quick Start with D5 Module:

### • Necessary components

- Hamilton VisiFerm Optical DO sensor
- Cable: <u>WU10-V-D Yokogawa cable</u> or Hamilton VP8 cable
- FLXA402 Multi Channel 4-Wire Analyzer with D5 module

### • Wiring connection

External power supply is not required as terminals 10 and 13 from D5 digital module provide power supply.

| FLXA402-D5                   | WU10-V-D     | Hamilton VP8     |  |
|------------------------------|--------------|------------------|--|
| Terminal number - Function   | Color        | Color            |  |
| 14 - Cable shield/Probe body | -            | -                |  |
| 13 - Power ground            | White shield | Red shield/Black |  |
| 12 - RS485 B+                | Green        | Brown            |  |
| 11 - RS485 A-                | Yellow       | Yellow           |  |
| 10 - 5 to 30 VDC             | White core   | Red Core         |  |
| 18 -                         | -            | -                |  |
| 17 -                         | -            | -                |  |
| 16 -                         | -            | -                |  |
| 15 -                         | -            | -                |  |

### • Configuration

- I. Set desired DO unit (ppm, ppb, mg/L, or %SAT).
  - Path to set DO unit:
    - From home page, click on bottom right sensor "Menu" > "Setting" > "Measure setting" > "Unit" > select desired unit > click on top right blue "Save" icon > click on top right "Home" menu to go back to home page.
- II. Configure mA output.
  - Path to configure mA output:
    - From home page, click on top right convertor "Menu" > "Setting" > "MA output settings" > select appropriate mA and as per requirement change parameter/range/setup etc. > click on top right blue "Save" icon > click on top right "Home" menu to go back to home page.

## **Quick Start with D1 Module:**

### • Necessary components

- o Hamilton VisiFerm Optical DO sensor
- Cable: WU10-V-D Yokogawa cable, Hamilton VP6 or Hamilton VP8 cable
- FLXA402 Multi Channel 4-Wire Analyzer with D1 module
- 24 VDC external power supply

#### • Wiring connection

External 24 VDC power supply is required as D1 module does not provide power.

| FLXA402-D1                  | WU10-V-D                           | Hamilton VP6              | Hamilton VP8                |  |
|-----------------------------|------------------------------------|---------------------------|-----------------------------|--|
| Terminal number - Function  | Color                              | Color                     | Color                       |  |
| 11 – Temp T1                | Red, NTC 22K                       | White, NTC 22K            | White, NTC 22K              |  |
| 12 – Temp T2                | Blue, NTC 22K                      | Green, NTC 22K            | Green, NTC 22K              |  |
| 16 – NC (not connected)     | None                               | None                      | None                        |  |
| 15 – +anode Galvanic        | None                               | None                      | None                        |  |
| 13 – -cathode Galvanic      | None                               | None                      | None                        |  |
| 14 – LE                     | Shield – Black                     | Shield – Yellow/<br>Green | Shield – Yellow/<br>Green   |  |
| 17 – -cathode Polarographic | Brown core                         | Black<br>core/Transparent | Black core/<br>Transparent  |  |
| 18 – +anode Polarographic   | Brown Shield                       | Red Shield                | Black shield                |  |
|                             | Using 24 VDC external power supply |                           |                             |  |
|                             | White Core, +24VDC                 | Grey, +24VDC              | Red core, +24VDC            |  |
|                             | White shield,<br>Ground            | Blue, Ground              | Red shield/Black,<br>Ground |  |

### • Configuration

I. Select Polarographic for sensor type.

- Follow below path:
  - From home page, click on bottom right sensor "Menu" > "Setting" > "Configure sensor" > "Sensor type" > select "Polarographic" > click "Ok" > click on top right blue "Save" icon > click on top right "Home" menu to go back to home page.
- II. Change the temperature element to 22k NTC.
  - Follow below path:
    - From home page, click on bottom right sensor "**Menu**" > "**Setting**" > "**Configure sensor**" > "**Temp. Element**" > select "**NTC 22k**" > click "**Ok**" > click on top right blue "**Save**" icon > click on top right "**Home**" menu to go back to home page.

- III. Leave the sensor sensitivity set to default value of 7.5 nA/ppm.
  - To check the sensor sensitivity, follow below path:
    - From home page, click on bottom right sensor "**Menu**" > "**Setting**" > "**Configure sensor**" > Scroll down until you see "**Polarographic**" "**Sensor sensitivity**" > leave sensor sensitivity to "**7.5 nA/ppm**" > click on top right "**Home**" menu to go back to home page.
- IV. Set desired DO unit (ppm, ppb, mg/L, or %SAT).
  - Follow below path to set DO unit:
    - From home page, click on bottom right sensor "Menu" > "Setting" > "Measure setting" > "Unit" > select desired unit > click on top right blue "Save" icon > click on top right "Home" menu to go back to home page.
- V. Configure mA output.
  - Follow below path to configure mA output:
    - From home page, click on top right convertor "**Menu**" > "**Setting**" > "**mA output settings**" > select appropriate mA and as per requirement change parameter/range/setup etc. > click on top right blue "**Save**" icon > click on top right "**Home**" menu to go back to home page.



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