



Modular 2-wire Liquid Analyzer  
**FLXA21**

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[www.yokogawa.com/us/ia/analytical/FLXA21.htm](http://www.yokogawa.com/us/ia/analytical/FLXA21.htm)

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# The FLXA21 Modular 2-wire Liquid Analyzer can measure several different liquid

## Modular 2-wire Liquid Analyzer

# FLXA21

The FLXA21 is a next-generation modular liquid analyzer that can be flexibly configured to measure pH/ORP, contacting conductivity, inductive conductivity, or dissolved oxygen.

The FLXA21 also supports the installation of up to two sensors of the same type, thereby reducing installation costs and saving space in addition to enabling the configuration of a highly reliable backup system.

It has reliable and advanced features and functions such as a touch screen for improved operability, sensor self-diagnosis, maintenance time estimation, and 12 language display options.



### Support of Up to Two Sensors and Digital Communications for Increased Reliability and Reduced Maintenance and Instrumentation Costs

- The FLXA21 supports the use of up to two sensors\*.

**New feature**

\* The two sensors must be of the same type.

\* With inductivity sensors, only one sensor may be connected.

- Backup system with two sensors increases measurement reliability. **New feature**
- Measurement at two points with a single analyzer reduces installation costs and saves space.

- Interruption-free measurement is assured even during maintenance.

- Digital communications options for reduced maintenance and instrumentation costs  
HART communications FOUNDATION™ fieldbus and Profibus options will also be available in the future.

### Modular Design for Increased Scalability **New feature**

- The modular design enables the construction of a variety of systems.
- Users can opt to do without a display and can also select the case material (plastic or stainless steel).
- Intrinsically safe type and non-incendive/type “n” of ATEX, IECEx, CSA and FM (FM and CSA Pending)



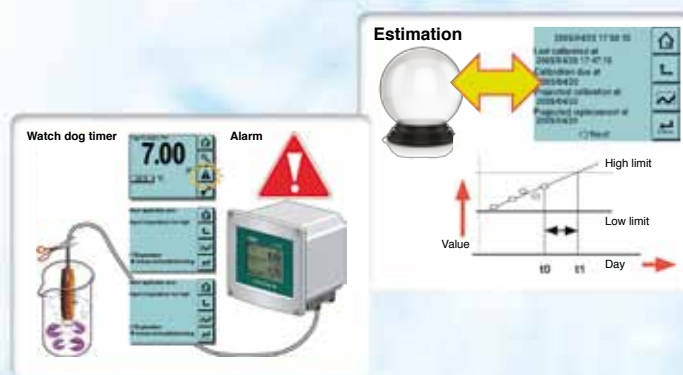
### Touch Screen for Improved Operability

- The interactive touch screen is easy to use and helps eliminate operator errors.
- Several different display modes are available.
- In the event of an error, the screen displays an error code and indicates the corrective action to be taken.
- With routine operations, prompts and other messages eliminate the need to consult the instruction manual.



### Advanced Functions

- Sensors with self-diagnostics capabilities**  
Continuous measurement of sensor impedance, asymmetric potential, and slope, and continuous monitoring for electrode contamination/damage, burnout, and decline in measurement liquid level (ex. pH Analyzer)
- Display of sensor status and estimated maintenance time**  
Save the latest five calibration results and estimate the future maintenance and calibration times.
- Quick setup**  
Screen instructions (guidance messages) make setup quick and easy.



### Full Sensor Line-up for a Broad Range of Applications

- The FLXA21 can be connected to a wide variety of pH/ORP, contacting conductivity, inductive conductivity, and dissolved oxygen sensors.



pH/ORP sensors



Contacting conductivity sensors



Inductive conductivity sensors

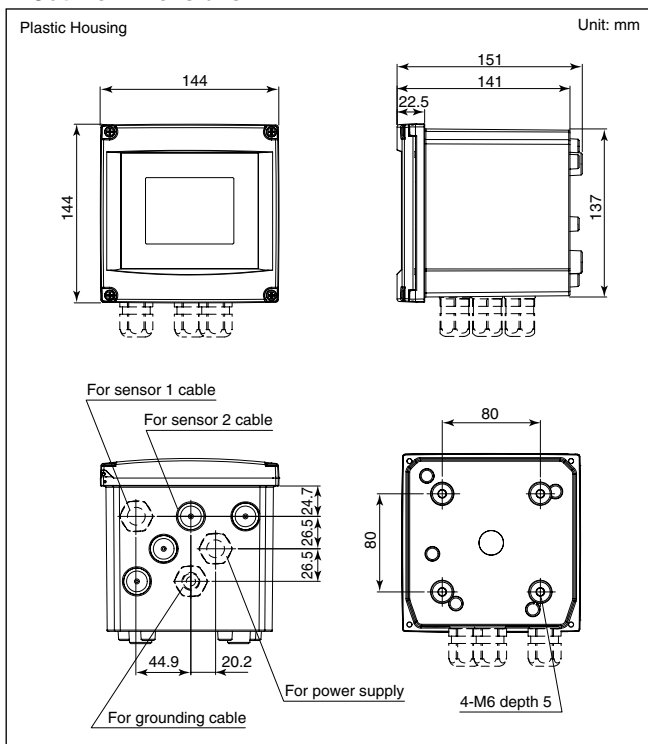


Dissolved oxygen sensors

## General Specifications

<b>Housing</b>	Case: Plastic or stainless steel (with or without urethane or epoxy coating) Window: Polycarbonate
<b>Protection</b>	IP66 (except Canada), NEMA 4X (except Canada)
<b>Outline Dimensions</b>	Plastic: 144 (L) x 144 (W) x 151 (D) mm Stainless steel: 165 (L) x 165 (W) x 160.1 (D) mm
<b>Weight</b>	Approx. 1 kg (Plastic housing), Approx. 2 kg (Stainless steel housing)
<b>Display</b>	Black/white LCD with a touch screen (213 x 160 pixels)
<b>Mounting</b>	Pipe, wall or panel mounting Conduit adapter: G1/2, 1/2 NPT or M20 x 1.5
<b>Environmental Conditions</b>	Ambient temperature: -20 to 55°C Storage temperature: -30 to 70°C Ambient humidity: 10 to 95%RH (Non-condensing)
<b>Power Supply</b>	Nominal 24 V DC loop powered system
<b>Regulatory Compliance</b>	Safety: EN61010-1, UL 61010-1 (pending), CSA C22.2 No.61010-1 (pending) EMC: EN61326-1 Class A, Table 2 (For use in industrial locations) EN61326-2-3, AS/NZS CISPR11
<b>Output Signal</b>	One isolated output of 4 to 20 mA DC, 2-wire system
<b>Communication</b>	HART

## Outline Dimensions



## Model & Suffix Codes

Model	Suffix code	Option code	Description	
FLXA21	-----	-----	2-Wire Analyzer	
Power Supply	-D	-----	Always -D	
	-P -S -U -E	-----	Plastic Stainless steel Stainless steel + urethane coating Stainless steel + epoxy coating	
Display	-D -N	-----	Anti-glare LCD Without display (Note 1)	
	-AA -EA	-----	General purpose ATEX, IECEx, FM, CSA (Note 6)	
1st input	-P1 -C1 -C5 -D1	-----	pH/ORP Conductivity (SC) Inductive conductivity (ISC) Dissolved oxygen (DO)	
	2nd input (Note 2)	-NN -P1 -C1 -D1	-----	Without input pH/ORP Conductivity (SC) Dissolved oxygen (DO)
		-A	-----	4-20 mA + HART
		-N	-----	Always -N
-LA		-----	English and 10 languages	
Language set (Note 3)	-N -J -NN	-----	Global except Japan Japan Always -NN	
Country (Note 4)	-NN	-----	Always -NN	
Option	Mounting hardware	/UM /U /PM	Universal mounting kit (Note 5) Pipe and wall mounting hardware Panel mounting hardware	
	Hood	/H6 /H7 /H8	Hood, stainless steel Hood, stainless steel + urethane coating Hood, stainless steel + epoxy coating	
		Tag plate	/SCT	Stainless steel tag plate
		Conduit adapter	/CB4 /CD4 /CF4	Conduit adapter (G1/2 x 4 pcs) Conduit adapter (1/2NPT x 4 pcs) Conduit adapter (M20 x 1.5 x 4 pcs)

### Notes:

- HMI (Human Machine Interface) is not available on the analyzer. HART communication is to be used.
- When a 2nd input is selected, only the same kind of the 1st input is available. For example, when a 1st input is "-P1", the 2nd input must be the same "-P1". The combination of ISC and ISC is not available.
- These languages are message languages on the analyzer's display. One analyzer has English and 10 languages. All languages are as follows; English, Chinese, Czech, French, German, Italian, Japanese, Korean, Portuguese, Russian, Spanish.
- When an analyzer is used in Japan, it must meet the Japanese Measurement Law. Only SI units must be used on the analyzer and its documents in Japan.
- The universal mounting kit contains the pipe and wall mounting hardware (/U) and the panel mounting hardware (/PM).
- The type "-EA" is intrinsically safe type and non-incendive/type "n" of ATEX, IECEx, FM and CSA. (pending)

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