

Rack Mount Transducers Modular Series DAQ-8

Features

- Up to eight transducers in one module
- 16, 7, or 3 modules in one panel
- True rms measurements
- Very high transducer density per panel
- Simple installation and calibration
- Easy configuration from the front via Modbus RTU

Modules

- Voltage
- Current
- Voltage / Current
- Watt / Var
- 3 Phase Watt / Var
- Power Factor
- Phase Angle
- Frequency

Outputs

- 4 20 mA
- 0 20 mA
- 0 to ±1 mA
- 1 5 mA
- 0 10 V

Description

The DAQ-8 Series Transducer* product is a family of high density plug-in modules for the Energy Sector and Industrial Markets.

The DAQ-8 Series is available for 19" rack, Half-rack and Quarter rack mounting (16,7and 3 Modules).

Each module has up to 8 transducers with 8 analog outputs and a backplane termination assembly.

All transducers provide true rms values.

One important feature for maintenance is that a replacement module, as soon as plugged-in, will automatically use the configuration setup from the old module if desired.

* Powered by Apix ISODAQ Technology.







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Rack Mount Transducers Modular Series DAQ-8

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The DAQ-8C Current Transducer Module is for measuring AC waveforms that may or may not be pure sine waves. Current measurements can also be done directly without a transformer for each transducer in this Module.

The DAQ-8C module can replace up to 8 transducers. Up to 8 individual mA or V outputs are available for connection to SCADA systems, PLC's and recorders.

This module includes a front plug-in unit and a rear termination backplane assembly.

In case of replacement, the new front unit will automatically use the configuration settings from the old unit if desired. The rear termination assembly does not normally need to be replaced. Power is automatically available when Module is plugged into the Rack.

These and other features can dramatically lower equipment and installation costs as well as maintenance overhead.



Order Information for each Module:

DAQ-2C-XY (2 Transducers)	DAQ (4 Trai	- 4C-XY nsducers)	DAQ-8C-XY (8 Transducers)	
X stands for type of Please replace as p	f output. per the followi	ng table:		
Output	X Digit	Load Resistance	Y stands for the inp The value for that is	out current range. S:
0 to ±1 mA 1-5 mA	2	0 - 10 KΩ	Input Range	Y Digit
0 - 20 mA	3	0 - 1200 Ω	0 - 1 A	1
4 - 20 mA	4	0 - 1200 Ω	0 - 5 A	5
0 - 10 V	5	>1KΩ		

2

Current Input Calibrated Range	0 - 1 A			
Range with Linearity	0 - 1.2 A	Temperature Effect (On Accuracy	
Overload per IEC60688	45 A	Span Drift	±0.001 %/°C, max	
Calibrated Range	Ο - 5 Δ	Resolution	16 bits	
Range with Linearity	0 - 10 A			
Overload per IEC60688	200 A	Temperature Range		
		Operating	-25 to 65 °C	
Burden/Transducer	0.15 VA	Storage	-40 to 85 °C	
Ontional specify nominal	40 to 70 Hz			
optional speeny norminal	10 10 1000 112	Humidity	< 95 % Non Condensing	
Analog Output	0 to ±1 mA			
(See Order Information)	1-5mA	Surge Withstand		
	0 - 20 mA 4 - 20 mA	5 KV peak test volta	age per	
	0 - 10 V	IEC 60688 and IEC	60521	
Maximum Current	24 mA	Auxiliary Power Su	ylggu	
Load Resistance		Supply Voltage 18 to 72 VDC		
Output	Resistance	.		
0 to ±1 mA	0 - 10 ΚΩ	Power is automatica	ally available when	
1-5mA	0-5ΚΩ	itself has a single P	ower Input rated at	
0-20 mA	0 - 1200 Ω	18 to 72 V. This is	distributed to each	
0-10 V	>1KΩ	Module via the Rac	k Backplane.	
Accuracy C	Class 0.2 per IEC 60688		0 n 2 \\\/	
C	lass 0.1 optional	DAQ-20-XT	2 VV	
		DAQ-4C-XY	3.5 W	
Output Ripple Peak	<0.06 % of Reading	DAQ-8C-XY	7 W	
Response Time	400 + - 00 0 0/			
	100 mSec to 99.9 %			
	of reading	Dimensions		
	of reading	Dimensions Height	173 H (mm)	
Calibration Adjustments	of reading	Dimensions Height Depth	173 H (mm) 122 D (mm)	
Calibration Adjustments The user can perform any	of reading adjustments of Span	Dimensions Height Depth Width	173 H (mm) 122 D (mm) 25 W (mm)	
Calibration Adjustments The user can perform any and Zero for calibration or	adjustments of Span other purposes	Dimensions Height Depth Width	173 H (mm) 122 D (mm) 25 W (mm)	





The DAQ-8E Voltage Transducer Module is for measuring AC waveforms that may or may not be pure sine waves. This can be done directly without a transformer for each transducer in this Module.

The DAQ-8E module can replace up to 8 transducers. Up to 8 individual mA or V outputs are available for connection to SCADA systems, PLC's and recorders.

This module includes a front plug-in unit and a rear termination backplane assembly.

In case of replacement, the new front unit will automatically use the configuration settings from the old unit if desired. The rear termination assembly does not normally need to be replaced. Power is automatically available when Module is plugged into the Rack.

These and other features can dramatically lower equipment and installation costs as well as maintenance overhead.



Order Information for each Module:

DAQ-2E-X	DAQ-4E-X	DAQ-8E-X
(2 Transducers)	(4 Transducers)	(8 Transducers)

X stands for type of output. Please replace as per the following table:

Output	X Digit	Load Resistance
0 to ±1 mA	1	0 - 10 ΚΩ
1 - 5 mA	2	0 - 5 ΚΩ
0 - 20 mA	3	0 - 1200 Ω
4 - 20 mA	4	0 - 1200 Ω
0 - 10 V	5	>1 KΩ

5

Voltage Input Calibrated Range Range with Linearity Overload Continuous Burden/Transducer Erequency Range	0 - 280 Vrms 0 - 320 Vrms 400 Vrms 0.02 VA 40 to 70 Hz	Temperature Effect (Zero Drift Span Drift Resolution	Dn Accuracy ±0.001 % /°C of Span ±0.004 %/°C, max 16 bits
Optional specify nominal	10 to 1000 Hz	Temperature Range Operating	-25 to 65 °C
Analog Output (See Order Information)	0 to ±1 mA 1 - 5 mA	Storage	-40 to 85 °C
	0 - 20 mA 4 - 20 mA 0 - 10 V	Humidity	< 95 % Non Condensing
Maximum Current	24 mA	Surge Withstand 5 KV peak test volta IEC 60688 and IEC	age per 60521
Load Resistance			
Output	Resistance	Auxiliary Power S	vladn
0 to ±1 mA	0 - 10 ΚΩ	Supply Voltage 18 t	0 72 VDC
1 - 5 mA	0-5ΚΩ		
0 - 20 mA	0 - 1200 Ω	Power is automatica	ally available when
4 - 20 mA 0 - 10 V	0 - 1200 Ω > 1 ΚΩ	Module is plugged i itself has a single P 18 to 72 V. This is o	nto the Rack. The Rack ower Input rated at distributed to each
Accuracy (Class 0.2 per IEC 60688		K Daukpiane.
C	Class 0.1 optional	Power Consumpt DAQ-2E-X	i on 2 W
Output Ripple Peak	<0.06 % of Reading	DAQ-4E-X	3.5 W
Response Time	100 mSec to 99.9% of reading	DAQ-8E-X	7 W
Calibration Adjustments The user can perform any adjustments of Span and Zero for calibration or other purposes		Dimensions Height Depth Width	173 H (mm) 122 D (mm) 25 W (mm)





DAQ-8CE AC CURRENT and VOLTAGE - True RMS Rack Mount Transducer Module

Description

The DAQ-8CE Current and Voltage Transducer Module is for measuring AC waveforms that may or may not be pure sine waves. This can be done directly without a transformer for each transducer in this Module.

The DAQ-8CE module can replace up to 4 Current and 4 Voltage transducers.

Up to 8 individual mA or V outputs are available for connection to SCADA systems, PLC's and recorders.

This module includes a front plug-in unit and a rear termination backplane assembly.

In case of replacement, the new front unit will automatically use the configuration settings from the old unit if desired. The rear termination assembly does not normally need to be replaced. Power is automatically available when Module is plugged into the Rack.

These and other features can dramatically lower equipment and installation costs as well as maintenance overhead.



Order Information for each Module:

DAQ-2CE-XY	DAQ-4CE-XY	DAQ-8CE-XY
(1C+1E Transducers)	(2C+2E Transducers)	(4C+4E Transducers)

X stands for type of output. Please replace as per the following table:

Output	X Digit	Load Resistance	Y stands for the inp The value for that is	out current range. S:
0 to ±1 mA	1	0 - 10 ΚΩ	Innut Range	Y Digit
Am c - I	2	0-5K2	input italige	i Digit
0 - 20 mA	3	0 - 1200 Ω	0 - 1 A	1
4 - 20 mA	4	0 - 1200 Ω	0 - 5 A	5
0 - 10 V	5	> 1 KΩ		

8

Voltage Input Calibrated Range Range with Linearity Overload Continuous Burden/Transducer Frequency Range Optional specify nominal	0 - 280 Vrms 0 - 320 Vrms 400 Vrms 0.02 VA 40 to 70 Hz 10 to 1000 Hz	Calibration Adjust The user can perfor Span and Zero for c Temperature Effect (Zero Drift Span Drift (C)	ments rm any adjustments of calibration or other purpose. On Accuracy ±0.001 % /°C of Span ±0.003 %/°C, max
Current Input		Span Drift (E) Resolution	±0.004 %/°C, max 16 bits
Calibrated Range Range with Linearity Overload per IEC60688	0 - 1 A 0 - 1.2 A 45 A	Temperature Range Operating Storage	-25 to 65 °C -40 to 85 °C
Calibrated Range Range with Linearity Overload per IEC60688	0 - 5 A 0 - 10 A 200 A	Humidity	< 95 % Non Condensing
Burden/Transducer Frequency Range	0.15 VA 40 to 70 Hz 10 to 1000 Hz	Surge Withstand 5 KV peak test volta IEC 60688 and IEC	age per 60521
Analog Output	0 to ±1 mA	Auxiliary Power Se Supply Voltage 18 t	upply to 72 VDC
Maximum Current	0 - 20 mA 4 - 20 mA 0 - 10 V 24 mA	Power is automatica Module is plugged i The Rack itself has rated at 18 to 72 VE	ally available when nto the Rack. a single Power Input DC. This is distributed to
Load Resistance		each Module via the	e Rack Backplane.
Output	Resistance	Power Consumpt	ion
0 to $\pm 1 \text{ mA}$	0 - 10 KΩ 0 - 5 KO	DAQ-2CE-XY	2 VV
0 - 20 mA	0 - 1200 0	DAQ-4CE-XY	35W
4 - 20 mA	0 - 1200 Ω		0.0 W
0 - 10 V	>1 ΚΩ	DAQ-8CE-XY	7 W
Accuracy	Class 0.2 per IEC 60688 Class 0.1 optional	Dimensions Height	173 H (mm)
Output Ripple Peak	<0.06 % of Reading	Width	25 W (mm)
Response Time	100 mSec to 99.9 % of reading		





The DAQ-8WV Watt and VAR Transducer Module is for measuring AC waveforms that may or may not be pure sine waves. This can be done directly without a transformer for each transducer in this Module.

The DAQ-8WV module can replace up to 4 combined Watt/Var transducers. Both Watt and Var values are available simultaneously for SCADA systems, PLC's and recorders.

This module includes a front plug-in unit and a rear termination backplane assembly.

In case of replacement, the new front unit will automatically use the configuration settings from the old unit if desired. The rear termination assembly does not normally need to be replaced. Power is automatically available when Module is plugged into the Rack.

These and other features can dramatically lower equipment and installation costs as well as maintenance overhead.



Order Information for each Module:

DAQ-2WV-XY	DAQ-4WV-XY	DAQ-8WV-XY
(1W+1Var Transducers)	(2W+2Var Transducers)	(4W+4Var Transducers)

X stands for type of output. Please replace as per the following table:

Output	X Digit	Load Resistance
0 to ±1 mA	1	0 - 10 ΚΩ
1 - 5 mA	2	0 - 5 ΚΩ
0 - 20 mA	3	0 - 1200 Ω
4 - 20 mA	4	0 - 1200 Ω
0 - 10 V	5	> 1 KΩ

Y stands for the input current range. The value for that is:

Input Range	Y Digit
0 - 1 A	1
0 - 5 A	5

Voltage Input		Calibration Adjust	ments
Calibrated Range Range with Linearity	0 - 280 Vrms 0 - 320 Vrms	The user can perfore Span and Zero for a	rm any adjustments of calibration or other purpose.
Overload Continuous Burden/Transducer Frequency Range Optional specify nominal	400 Vrms 0.02 VA 40 to 70 Hz 10 to 1000 Hz	Temperature Effect (Zero Drift Span Drift (C) Span Drift (E)	• • • • • • • • • • • • • • • • • • • •
Current Input		Resolution	16 bits
Calibrated Range Range with Linearity Overload per IEC60688	0 - 1 A 0 - 1.2 A 45 A	Temperature Range Operating Storage	-25 to 65 °C -40 to 85 °C
Calibrated Range Range with Linearity Overload per IEC60688	0 - 5 A 0 - 10 A 200 A	Humidity	< 95 % Non Condensing
Burden/Transducer Frequency Range Optional specify nominal	0.15 VA 40 to 70 Hz 10 to 1000 Hz	Surge Withstand 5 KV peak test volta IEC 60688 and IEC	age per 60521
Analog Output	0 to ±1 mA	Auxiliary Power S Supply Voltage 18 t	upply to 72 VDC
(See Order Information) Maximum Current	1 - 5 mA 0 - 20 mA 4 - 20 mA 0 - 10 V 24 mA	Power is automatic Module is plugged i The Rack itself has rated at 18 to 72 VI	ally available when into the Rack. a single Power Input DC. This is distributed to
Lood Desistence		each Module via the	e Rack Backplane.
Load Resistance Output	Resistance	Power Consumpt	ion
0 to $\pm 1 \text{ mA}$	0 - 10 ΚΩ	DAQ-2WV-XY	2 W
0 - 20 mA	0 - 1200 Ω	DAQ-4WV-XY	3.5 W
4 - 20 mA 0 - 10 V	0 - 1200 Ω > 1 KΩ	DAQ-8WV-XY	7 W
Accuracy	Class 0.2 per IEC 60688 Class 0.1 optional	Dimensions Height	173 H (mm)
Output Ripple Peak	<0.06 % of Reading	Width	25 W (mm)
Response Time	100 mSec to 99.9 % of reading		





The DAQ-4PF Power Factor Transducer Module is for measuring AC waveforms that may or may not be pure sine waves. This can be done directly without a transformer for each transducer in this Module.

The DAQ-4PF module can replace up to 4 Power Factor transducers.

Up to 4 individual mA or V outputs are available for connection to SCADA systems, PLC's and recorders.

This module includes a front plug-in unit and a rear termination backplane assembly.

In case of replacement, the new front unit will automatically use the configuration settings from the old unit if desired. The rear termination assembly does not normally need to be replaced. Power is automatically available when Module is plugged into the Rack.

These and other features can dramatically lower equipment and installation costs as well as maintenance overhead.



DAQ-1PF-XY

DAQ-2PF-XY (2 PF Transducers)

DAQ-4PF-XY

X stands for type of output. Please replace as per the following table:

Output	X Digit	Load Resistance	Y stands for the input current ra The value for that is:	
0 to ±1 mA	1	0 - 10 ΚΩ		
1 - 5 mA	2	0 - 5 ΚΩ	Input Range	Y Digit
0 - 20 mA	3	0 - 1200 Ω	0 - 1 A	1
4 - 20 mA	4	0 - 1200 Ω	0 - 5 A	5
0 - 10 V	5	> 1 KΩ		



Voltage Input Calibrated Range Range with Linearity Overload Continuous Burden/Transducer Frequency Range Optional specify nominal Current Input Calibrated Range	0 - 280 Vrms 0 - 320 Vrms 400 Vrms 0.02 VA 40 to 70 Hz 10 to 1000 Hz	Calibration Adjust The user can perfor Span and Zero for o Temperature Effect o Zero Drift Span Drift (C) Span Drift (E) Resolution	ments rm any adjustments of calibration or other purpose. On Accuracy ±0.001 % /°C of Span ±0.003 %/°C, max ±0.004 %/°C, max 16 bits
Range with Linearity Overload per IEC60688	0 - 1.2 A 45 A	Temperature Range Operating Storage	-25 to 65 °C -40 to 85 °C
Calibrated Range Range with Linearity Overload per IEC60688	0 - 5 A 0 - 10 A 200 A	Humidity	< 95 % Non Condensing
Burden/Transducer Frequency Range Optional specify nominal	0.15 VA 40 to 70 Hz 10 to 1000 Hz	5 KV peak test volta	age per 60521
Analog Output (See Order Information)	0 to ±1 mA 1 - 5 mA 0 - 20 mA 4 - 20 mA	Auxiliary Power S Supply Voltage 18 t Power is automatic Module is plugged i	upply to 72 VDC ally available when into the Rack.
Maximum Current	0 - 10 V 24 mA	rated at 18 to 72 VI each Module via the	DC. This is distributed to Rack Backplane.
Load Resistance		_	_
Output	Resistance	Power Consumpt	ion
0 to ±1 mA	0 - 10 ΚΩ	DAQ-1PF-XY	1.3W
1 - 5 mA	0-5KΩ		0.147
0-20 mA	0 - 1200 Ω	DAQ-2PF-XY	2 VV
4 - 20 MA 0 - 10 V	0 - 1200 Ω > 1 KΩ	DAQ-4PF-XY	3.5 W
Accuracy	Class 0.2 per IEC 60688 Class 0.1 optional	Dimensions Height Depth	173 H (mm)
Output Ripple Peak	<0.06 % of Reading	Width	25 W (mm)
Response Time	100 mSec to 99.9 % of reading		





The DAQ-3PV3C 3 Phase 4 Wire Unbalanced Transducer Module is for measuring AC waveforms that may or may not be pure sine waves. This can be done directly without a transformer for each transducer in this Module.

Individual mA or V outputs are available for connection to SCADA systems, PLC's and recorders.

This module includes a front plug-in unit and a rear termination backplane assembly.

In case of replacement, the new front unit will automatically use the configuration settings from the old unit if desired. The rear termination assembly does not normally need to be replaced.

Power is automatically available when Module is plugged into the Rack.

These and other features can dramatically lower equipment and installation costs as well as maintenance overhead.



Order Information for each Module:

DAQ-3PV3C-XY (Total W - Total Var Transducer)

X stands for type of output. Please replace as per the following table:

X Digit	Load Resistance
1	0 - 10 ΚΩ
2	0 - 5 ΚΩ
3	0 - 1200 Ω
4	0 - 1200 Ω
5	>1 ΚΩ
	X Digit 1 2 3 4 5

Y stands for the input current range. The value for that is:

Input Range	Y Digit
0 - 1 A	1
0 - 5 A	5

Voltage Input Calibrated Range Range with Linearity	0 - 280 Vrms 0 - 320 Vrms 400 Vrms	Calibration Adjustments The user can perform any adjustments of Span and Zero for calibration or other purpo	
Burden/Transducer Frequency Range Optional specify nominal	0.02 VA 40 to 70 Hz 10 to 1000 Hz	Temperature Effect (Zero Drift Span Drift (C) Span Drift (E)	On Accuracy ±0.001 % /°C of Span ±0.003 %/°C, max ±0.004 %/°C, max
Current Input		Resolution	16 bits
Calibrated Range Range with Linearity Overload per IEC60688	0 - 1 A 0 - 1.2 A 45 A	Temperature Range Operating Storage	-25 to 65 °C -40 to 85 °C
Calibrated Range Range with Linearity Overload per JEC60688	0 - 5 A 0 - 10 A 200 A	Humidity	< 95 % Non Condensing
Burden/Transducer Frequency Range	0.15 VA 40 to 70 Hz	Surge Withstand 5 KV peak test volta IEC 60688 and IEC	age per 60521
Optional specify nominal		Auxiliary Power S	upply
Analog Output	0 to ±1 mA	Supply Voltage 18 t	o 72 VDC
(See Order Information)	0 - 20 mA 4 - 20 mA 0 - 10 V	Power is automatica Module is plugged i The Rack itself has	ally available when nto the Rack. a single Power Input
Maximum Current	24 mA	each Module via the	e Rack Backplane.
Load Resistance			_
Output	Resistance	Power Consumpt	ion
0 to $\pm 1 \text{ mA}$	0 - 10 KΩ	DAQ-3PV3C-XY	3 W
1 - 5 mA	0-5K12 0-1200-0		
4 20 mA	0 - 1200 0	Dimonoiono	
0-10V	> 1 KΩ	Height	173 H (mm)
		Depth	122 D (mm)
Accuracy	Class 0.2 per IEC 60688 Class 0.1 optional	Width	25 W (mm)
Output Ripple Peak	<0.06 % of Reading		
Response Time	100 mSec to 99.9 % of reading		



CONNECTION DIAGRAMS

3PV3C-XY



The DAQ-4PH Phase Angle Transducer Module is for measuring AC waveforms that may or may not be pure sine waves. This can be done directly without a transformer for each transducer in this Module.

The DAQ-4PH module can replace up to 4 Phase Angle transducers.

Up to 4 individual mA or V outputs are available for connection to SCADA systems, PLC's and recorders.

This module includes a front plug-in unit and a rear termination backplane assembly.

In case of replacement, the new front unit will automatically use the configuration settings from the old unit if desired. The rear termination assembly does not normally need to be replaced. Power is automatically available when Module is plugged into the Rack.

These and other features can dramatically lower equipment and installation costs as well as maintenance overhead.



Order Information for each Module:

D	AQ-	1PH	-XY	
(1	Phase	Angle	Transdu	ice

DAQ-2PH-XY

DAQ-4PH-XY (4 Phase Angle Transducers

X stands for type of output. Please replace as per the following table:

Output	X Digit	Load Resistance	Y stands for the input current ran The value for that is:	
0 to ±1 mA	1	0 - 10 ΚΩ		
1 - 5 mA	2	0 - 5 ΚΩ	Input Range	Y Digit
0 - 20 mA	3	0 - 1200 Ω	0 - 1 A	1
4 - 20 mA	4	0 - 1200 Ω	0 - 5 A	5
0 - 10 V	5	> 1 ΚΩ		

Voltage Input Calibrated Range Range with Linearity Overload Continuous	0 - 280 Vrms 0 - 320 Vrms 400 Vrms	Calibration Adjustments The user can perform any adjustments of Span and Zero for calibration or other purpose	
Burden/Transducer Frequency Range Optional specify nominal	0.02 VA 40 to 70 Hz 10 to 1000 Hz	Temperature Effect (Zero Drift Span Drift (C) Span Drift (E)	Dn Accuracy ±0.001 % /°C of Span ±0.003 %/°C, max ±0.004 %/°C, max
Current Input		Resolution	16 bits
Calibrated Range Range with Linearity Overload per IEC60688	0 - 1 A 0 - 1.2 A 45 A	Temperature Range Operating Storage	-25 to 65 °C -40 to 85 °C
Calibrated Range Range with Linearity Overload per IEC60688	0 - 5 A 0 - 10 A 200 A	Humidity	< 95 % Non Condensing
Burden/Transducer Frequency Range Optional specify nominal	0.15 VA 40 to 70 Hz 10 to 1000 Hz	Surge Withstand 5 KV peak test volta IEC 60688 and IEC	age per 60521
Analog Output	0 to ±1 mA	Auxiliary Power So Supply Voltage 18 t	u pply o 72 VDC
(See Order Information) Maximum Current	0 - 20 mA 4 - 20 mA 0 - 10 V 24 mA	Power is automatica Module is plugged i The Rack itself has rated at 18 to 72 VE	ally available when nto the Rack. a single Power Input DC. This is distributed to
Load Posistanco		each Module via the	е каск васкріапе.
Output	Resistance	Power Consumpt	ion
0 to ±1 mA 1 - 5 mA	0 - 10 ΚΩ 0 - 5 ΚΩ	DAQ-1PH-XY	1.3 W
0 - 20 mA 4 - 20 mA	0 - 1200 Ω 0 - 1200 Ω	DAQ-2PH-XY	2 W
0 - 10 V	>1 ΚΩ	DAQ-4PH-XY	3.5 W
Accuracy	Class 0.2 per IEC 60688 Class 0.1 optional	Dimensions Height	173 H (mm)
Output Ripple Peak	<0.06 % of Reading	Width	25 W (mm)
Response Time	100 mSec to 99.9 % of reading		







The DAQ-4F Frequency Transducer Module is for measuring the frequency of VAC waveforms. This can be done directly without a transformer for each transducer in this Module.

The DAQ-4F module can replace up to 4 frequency transducers. Up to 4 individual mA or V outputs are available for connection to SCADA systems, PLC's and recorders.

This module includes a front plug-in unit and a rear termination backplane assembly.

In case of replacement, the new front unit will automatically use the configuration settings from the old unit if desired. The rear termination assembly does not normally need to be replaced. Power is automatically available when Module is plugged into the Rack.

These and other features can dramatically lower equipment and installation costs as well as maintenance overhead.



Order Information for each Module:

DAQ-1F-X	DAQ-2F-X	DAQ-4F-X
(1Frequency Transducer)	(2 Frequency Transducers)	(4 Frequency Transducers)

X stands for type of output. Please replace as per the following table:

Output	X Digit	Load Resistance
0 to ±1 mA	1	0 - 10 ΚΩ
1 - 5 mA	2	0 - 5 ΚΩ
0 - 20 mA	3	0 - 1200 Ω
4 - 20 mA	4	0 - 1200 Ω
0 - 10 V	5	>1 ΚΩ

Voltage Input Calibrated Range Range with Linearity Overload Continuous Burden/Transducer	0 - 280 Vrms 0 - 320 Vrms 400 Vrms 0.02 VA 40 to 70 Hz	Temperature Effect (Zero Drift Span Drift Resolution	On Accuracy ±0.001 % /°C of Span ±0.004 %/°C, max 16 bits
Optional specify nominal	10 to 1000 Hz	Temperature Range Operating	-25 to 65 °C
Analog Output (See Order Information)	0 to ±1 mA 1 - 5 mA	Storage	-40 to 85 °C
	0 - 20 mA 4 - 20 mA 0 - 10 V	Humidity	< 95 % Non Condensing
Maximum Current	24 mA	Surge Withstand 5 KV peak test volta IEC 60688 and IEC	age per 60521
Load Resistance			
Output	Resistance	Auxiliary Power S	νίααυ
0 to ±1 mA	0 - 10 ΚΩ	Supply Voltage 18 t	o 72 VDC
1 - 5 mA	0-5ΚΩ		
0 - 20 mA	0 - 1200 Ω	Power is automatic	ally available when
4 - 20 mA	0 - 1200 Ω	Module is plugged i	into the Rack The Rack
0 - 10 V	>1 ΚΩ	itself has a single P 18 to 72 V. This is Module via the Rac	ower Input rated at distributed to each k Backplane.
Accuracy (Class 0.2 per IEC 60688		
(Class 0.1 optional	Power Consumpt DAQ-1F-X	ion 1.3 W
Output Ripple Peak	<0.06 % of Reading	DAQ-2F-X	2 W
Response Time	100 mSec to 99.9% of reading	DAQ-4F-X	3.5 W
Calibration Adjustments The user can perform any adjustments of Span and Zero for calibration or other purposes		Dimensions Height Depth Width	173 H (mm) 122 D (mm) 25 W (mm)



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