

# General Specifications

GS 62A DUAL-01E-A

## DUAL-VUE

Switchboard meters from YOKOGAWA.

- Features analog and digital display to provide the ultimate in readability of power and control parameters.
- A drop-in replacement for upgrade of existing control and switchgear panels.
- Rugged switchboard style case and IP54 rated cover.
- Choice of high-intensity LED digital displays with high reliability analog movements.
- Standard models for AC or DC voltage and current, with custom scales and legends available as options.

### DUAL-VUE switchboard meter specifications:

#### General Description

**DUAL-VUE** switchboard meters are combination Digital/Analog indicating instruments. They can be configured to accept ACV, ACA, DCV, or DCA input. Both the digital and analog displays can be modified to represent virtually any scaling or engineering units as required. The unit is contained in a 4 1/4" Switchboard housing. It utilizes a taut band moving element and a 0.56", 3 1/2 digit display for indication (+ or - 1999 counts).

#### Electrical Specifications

##### Input Ratings:

**DCV** – Standard inputs are 0-50mV, 100mV 200mV, 10V, 100V, 150V, 300V, 600V, +/-50mV, +/-100mV, +/-200mV, +/-10V, +/-100V, +/-150V, +/-300V, +/-600V Input impedance = 1M $\Omega$

**DCA** – Standard inputs are 0-200uA, 500uA, 1mA, 10mA, 100mA, 500mA, 1A, +/- 200uA, +/-500uA, +/-1mA, +/-10mA, +/-100mA, +/-500mA, +/-1A, 1-5mA, 4-20mA, 10-50mA Voltage Drop < 210mV (inputs < 500mA), < 510mV (inputs = 500mA)

**ACV** – Standard inputs are 0-150V, 250V, 300V, 600V Input impedance = 1M $\Omega$  Input Frequencies 45Hz to 65Hz

**ACA** – Standard inputs are 0-1A, 0-5A (Transformer coupled) Input Frequencies 45Hz to 65Hz Other ratings are possible. Contact Yokogawa for special ratings.

**Scaling:** Scaling options are limited only in that there can be no offset zero scaling for the digital display.

##### Overload:

Voltage Inputs: x 1.2 continuous or 700V max;  
x 1.5 for 10 seconds  
DC Current: x 1.2 continuous; x 1.5 for 10 seconds  
AC Current: x 2 continuous; x 5 for 10 seconds



##### Burden:

ACV < 0.5VA @ 600VAC  
ACA < 0.2VA @ 5AAC  
DCV < 0.5W @ 600VDC  
DCA < 0.5W @ 1ADC

##### Isolation Test Voltage:

2KV for 60 seconds aux. power to input, aux. power to case, input to case.

##### Power Supply

**Voltage:** 120V +/-15% standard ; optional 240V +/-15%  
**Frequency:** 50/60Hz +/- 2Hz (48Hz to 62Hz) Burden: < 3.5VA

##### Display

**Analog:** Taut-band, silicon-damped moving element. 220° Deflection. 6.35" total scale length. White scale with black markings & black pointer (standard). Response time less than 2.5 seconds (0-90%). Optional features include alternate black scale plates, custom logos, colored lines or segments or scale, white or Day-glo orange pointer. Center & Offset zero are available. The Analog display may be scaled to any scaling ratio or to represent any engineering units as required. No external zero regulator. Mechanical zero adjust with special tool. Electrical zero & FS adjust.

**Digital:** 3 1/2 digit, 7 segment display 0.56" (14.2mm) digit height. Red, blue or green LED. Negative Polarity indicator. Selectable decimal point settings. Update rate is 2.5 times/second. Response time less than 1 second (0-90%)

##### Accuracy

Reference conditions 25°C

**Analog:** +/-1% of full scale deflection

**Digital:** AC +/-0.1% of reading +/-3 counts. DC +/- 2 counts

##### Temperature Coefficient:

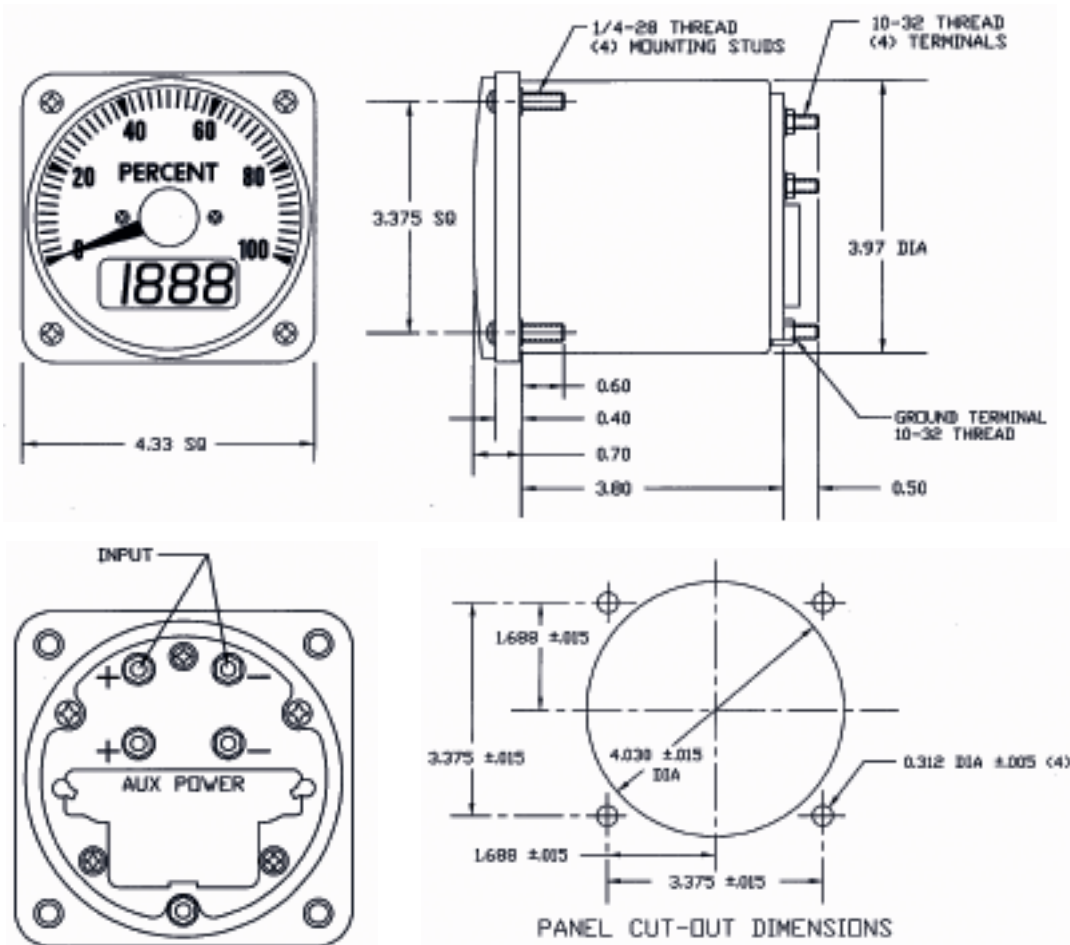
200ppm/°C of full scale for digital display. Less than 1% additional analog display error over operating temperature range.

**Long Term Stability:** +/-2 counts (digital), +/-0.8% (analog)

**Warm Up time:** 10 minutes

## Mechanical Specifications

**Enclosure:** DB-40 "Short" Case; cold rolled steel with protective coating



Cover:	Polycarbonate UL94V0 rated cover and window
Terminal Plate:	Phenol Resin
Mounting Studs:	1/4" x 28 Thread
Terminal studs:	10-32 Studs, 0.50" long
Enclosure Rating:	IP54 (Dust Proof/Splash Proof)
Weight:	<2.5 lbs (1134g) including all mounting and connection hardware.

## Environmental Specifications

Operating Temperature:	0°C to 60°C
Storage Temperature:	-20°C to 70°C
Humidity:	90% non-condensing relative humidity @ 40°C
Isolation Voltage	2kV for 1 minute between input and case, input and Aux Power, Aux Power and case
Vibration:	8-42Hz, 0.1 to 2 Gs, in 3 axis
Shock:	50 G's @ 7 ms for 10 shocks, in 3 axis
Calibration:	Recommended calibration interval is 2 years.

## Agency Approvals (Pending)

Safety:	UL 61010-1
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## Standard model ordering information

### DC VOLTMETERS AND AMMETERS 120V ac auxiliary power, white scale with black markings + pointer

Input	Rating/scale	Red LED Model#	Green LED Model#	Blue LED Model#
DCV	0-50mV	123011ABAB	124011ABAB	125011ABAB
	0-100mV	123011AEAE	124011AEAE	125011AEAE
	0-200mV	123011 AHAH	124011 AHAH	125011 AHAH
	50-0-50mV	123012 ABAB	124012 ABAB	125012 ABAB
	100-0-100mV	123012AEAE	124012AEAE	125012AEAE
	200-0-200mV	123012AHAH	124012AHAH	125012AHAH
	0-10V	123011MTMT	124011MTMT	125011MTMT
	0-100V	123011PKPK	124011PKPK	125011PKPK
	0-150V	123011PZPZ	124011PZPZ	125011PZPZ
	0-300V	123011RXRX	124011RXRX	125011RXRX
	0-600V	123011SJSJ	124011SJSJ	125011SJSJ
	10-0-10V	123012MTMT	124012MTMT	125012MTMT
	100-0-100V	123012PKPK	124012PKPK	125012PKPK
	150-0-150V	123012PZPZ	124012PZPZ	125012PZPZ
	300-0-300V	123012RXRX	124012RXRX	125012RXRX
	600-0-600V	123012SJSJ	124012SJSJ	125012SJSJ
	DCA	0-200uA	123111EAEA	124111EAEA
0-500uA		123111EMEM	124111EMEM	125111EMEM
200-0-200uA		123112EAEA	124112EAEA	125112EAEA
500-0-500uA		123112EMEM	124112EMEM	125112EMEM
0-1mA		123111FAFA	124111FAFA	125111FAFA
0-10mA		123111GZGZ	124111GZGZ	125111GZGZ
0-100mA		123111JRJR	124111JRJR	125111JRJR
0-500mA		123111KMKM	124111KMKM	125111KMKM
0-1A		123111LALA	124111LALA	125111LALA
1-0-1mA		123112FAFA	124112FAFA	125112FAFA
10-0-10mA		123112GZGZ	124112GZGZ	125112GZGZ
100-0-100mA		123112JRJR	124112JRJR	125112JRJR
500-0-500mA		123112KMKM	124112KMKM	125112KMKM
1-0-1A		123112LALA	124112LALA	125112LALA
1-5mA		123191FYFY	124191FYFY	125191FYFY
4-20mA		123191HEHE	124191HEHE	125191HEHE
10-50mA		123191HXHX	124191HXHX	125191HXHX

#### Notes:

1) For non-standard inputs and scales(or aux. power) select the closest rated input model from above and specify per example. **“Similar to model 123191HEHE except...”**

**Input signal:** 4-12-20mA dc

**Analog scale:** -1900-0-+1900 Scale color: white, letters + numerals: black, pointer: black

**Analog legend:** DC Amperes

**Digital scale:** +/-1900

**Digital sub-legend:** only required when digital scale is different value from analog.

**Auxiliary power:** 120V ac is standard; 240V ac optional, DC contact factory.

2) Non-standard models will be assigned a special 3 letter suffix at Yokogawa (ex: 123191HEHE/xxx)

**AC VOLTMETERS AND AMMETERS**  
**120V ac auxiliary power, white scale with black markings and pointer**

Input	Rating/scale	Red LED Model#	Green LED Model#	Blue LED Model#
<b>ACV</b>	0-150V 0-250V 0-300V 0-600V	123021PZPZ 123021RSRS 123021RXRX 123021SJSJ	124021PZPZ 124021RSRS 124021RXRX 124021SJSJ	125021PZPZ 125021RSRS 125021RXRX 125021SJSJ
<b>Transformer Rated (150V)</b>	0-150V/0-250V 0-150V/0-300V 0-150V/0-500V 0-150V/0-600V 0-150V/0-750V 0-150V/0-1500V 0-150V/0-3.00kV 0-150V/0-5.00kV 0-150V/0-5.25kV 0-150V/0-6.00kV 0-150V/0-9.00kV 0-150V/0-15.00kV 0-150V/0-18.00kV 0-150V/0-45.0kV 0-150V/0-150.0kV 0-150V/0-200kV 0-250V/0-600V	123021PZRS 123021PZRX 123021PZSF 123021PZSJ 123021PZSM 123021PZTC 123021PZVJ 123021PZVT 123021PZVV 123021PZVX 123021PZWJ 123021PZWZ 123021PZXE 123021PZXU 123021PZYR 123021PZYU 123021RSSJ	124021PZRS 124021PZRX 124021PZSF 124021PZSJ 124021PZSM 124021PZTC 124021PZVJ 124021PZVT 124021PZVV 124021PZVX 124021PZWJ 124021PZWZ 124021PZXE 124021PZXU 124021PZYR 124021PZYU 124021RSSJ	125021PZRS 125021PZRX 125021PZSF 125021PZSJ 125021PZSM 125021PZTC 125021PZVJ 125021PZVT 125021PZVV 125021PZVX 125021PZWJ 125021PZWZ 125021PZXE 125021PZXU 125021PZYR 125021PZYU 125021RSSJ
<b>ACA</b>	0-1A 0-5A	123131LALA 123131LSLS	124131LALA 124131LSLS	125131LALA 125131LSLS
<b>Transformer Rated (5A)</b>	0-5A/0-10.00A 0-5A/0-15.00A 0-5A/0-20.0A 0-5A/0-25.0A 0-5A/0-30.0A 0-5A/0-40.0A 0-5A/0-50.0A 0-5A/0-75.0A 0-5A/0-100.0A 0-5A/0-150.0A 0-5A/0-200A 0-5A/0-250A 0-5A/0-300A 0-5A/0-400A 0-5A/0-500A 0-5A/0-600A 0-5A/0-800A 0-5A/0-1000A 0-5A/0-1200A 0-5A/0-1500A	123131LSMT 123131LSND 123131LSNG 123131LSNJ 123131LSNL 123131LSNP 123131LSNT 123131LSPB 123131LSPK 123131LSPZ 123131LSRL 123131LSRS 123131LSRX 123131LSSC 123131LSSF 123131LSSJ 123131LSSN 123131LSSS 123131LSSV 123131LSTC	124131LSMT 124131LSND 124131LSNG 124131LSNJ 124131LSNL 124131LSNP 124131LSNT 124131LSPB 124131LSPK 124131LSPZ 124131LSRL 124131LSRS 124131LSRX 124131LSSC 124131LSSF 124131LSSJ 124131LSSN 124131LSSS 124131LSSV 124131LSTC	125131LSMT 125131LSND 125131LSNG 125131LSNJ 125131LSNL 125131LSNP 125131LSNT 125131LSPB 125131LSPK 125131LSPZ 125131LSRL 125131LSRS 125131LSRX 125131LSSC 125131LSSF 125131LSSJ 125131LSSN 125131LSSS 125131LSSV 125131LSTC

**Notes:**

1) For non-standard inputs and scales(or aux. power) select the closest rated input model from above and specify per example. **“Similar to model 123131LSLS except...”**

**Input signal:** 0 - 5A ac

**Analog scale:** 0 - 1900, Scale color: white, letters + numerals: black, pointer: black

**Analog legend:** AC Amperes

**Digital scale:** 0 - 1900

**Digital sub-legend:** only required when digital scale is different value from analog.

**Auxiliary power:** 120V ac is standard: 240V ac optional, DC contact factory.

2) Non-standard models will be assigned a special 3 letter suffix at Yokogawa (ex: 123131LSLS/xxx)