

Switchboard Instruments LS-Series

Description

Hoyt's LS-series switchboard instruments provide high visibility instrument readings for all AC parameters. The scale of each instrument in the series features high visibility markings and a 250-degree full-scale deflection. The 4-inch diameter meters are available in a variety of measuring ranges covering DC Amperes and Voltage, AC Amperes and Voltage, AC Frequency, VAR, and Phase Angle.

The LS-series switchboard instruments provide accuracy in accordance with ANSI Class 1.5 for Amperes, Voltage, KWatts, and Hertz, and to ± 4 degrees for phase angle. The instruments use either a moving coil construction for DC measurements, or moving iron construction for AC measurements. The Hoyt LS-series will support phase angle measurements to 500 V at 1 A or 5 A without the need for an external potential transformer; kiloWatt measurements at up to 500 V at 1 A or 5 A without the need for an external potential transformer; frequency up to 500 V at 1A or 5A without the need for an external potential transformer; AC current up to 5 A without the need for an external current transformer; DC current up to 20 A without the need for an external shunt.

The Hoyt LS-series are packaged in a black plastic meter body, with a acrylic resin cover, and Bakelite terminal plate. Mounting is via four studs, with a 4.37" (111mm) panel cutout. Black pointers are provided in all LS-series models.



HOYT

Hoyt Electrical Instruments Works Inc.

AC Ammeters

AC Amperes (Self-contained) Order Model LS-110-XAAC

Replace **X** in model number with Ampere Range (Max.):

1, 1.5, 2, 3, 5, 7.5, 8, 10, 15, 20, 25, 30

AC Amperes (Transformer-rated) Order Model LS-110-XACT

Replace **X** in model number with Ampere Range (Max.):

10, 15, 20, 25, 30, 40, 50, 60, 75, 80, 100, 150, 200, 250, 300, 400, 500, 600, 750, 800, 1000, 1200, 1500, 1600, 2000, 2500, 3000, 4000, 5000, 6000, 7000, 8000

AC Voltmeters

AC Volts (Average responding; rectifier type) Order Model LS-110-XVA

Replace **X** in model number with Voltage Range (Max.):

15, 30, 150, 300, 500, 600, 750

AC Volts (Average responding; 150 V transformer rated) Order Model LS-110-XVCT

Replace **X** in model number with Voltage Range (Max.):

300, 600

AC Volts (Expanded scale; self-contained) Order Model LS-110-110-130VA

110-130 V AC Voltage Range

AC Volts (Expanded scale; transformer rated) Order Model LS-110-110-130VACT

110-130 V AC Voltage Range

AC Varmeters

AC VAR (Three-phase, 4-wire) Order Model LS-110-VAR3P4-X-5AXX-Y

Replace **X** in model number with: Replace **Y** in model number with:

Specify dial

120 V/5 A 12 —
120 V/5 A OCTR 12 OTR
208 V/5 A 20 —
208 V/5 A OCTR 20 OTR
480 V/5 A 48 —
600 V/5 A 60 —

AC VAR (Single phase, 2-wire) Order Model LS-110-VAR1P-12-5AXX

Specify dials

120 V/5 A input

Frequency Meters

Frequency (120 V rated) Order Model LS-110-XHZ120

Frequency Range (Hz) Replace **X** in model number with:

45-55 45-55
45-65 45-65
50-70 50-70
55-65 55-65

AC Wattmeters

AC Watts (Single-phase, 2-wire) Order Model LS-110-WA1P-12-X

Replace **X** in Input Range model number with:

Supplied with Dials

120 V/1.25 A; 125 Watts 1.25A
120 V/2.5 A; 250 Watts 2.5A
120 V/5 A; 500 Watts 5 A
120 V/10 A; 1000 Watts 10A

Specify dials

120 V/5 A 5AXX

AC Watts (Three-phase, 3-wire) Order Model LS-110-WA3P3-X-5AXX

Replace **X** in Input Range model number with:

Specify dials

120 V/5 A 12
208 V/5 A 20
240 V/5 A 24
380 V/5 A 38
480 V/5 A 48
600 V/5 A 60

AC Watts (Three-phase, 4-wire) Order Model LS-110-WA3P4-X-5AXX

Replace **X** in Input Range model number with:

Specify dials

69 V/5 A 69
120 V/5 A 12
240 V/5 A 24
277 V/5 A 27
346 V/5 A 34

DC Ammeters

DC Amperes (Self-contained) Order Model LS-110-XAD

Replace **X** in A Range model number with:

0-1 1
0-5 5
0-10 10
0-15 15
0-20 20
0-30 30
0-40 40
0-50 50
0-60 60

DC Amperes (100 mV Shunt Rated) Order Model LS-110-X-100MVD

Replace **X** in A Range model number with:

0-10 10
0-15 15
0-20 20
0-30 30
0-50 50
0-75 75
0-100 100
0-150 150
0-200 200
0-300 300
0-500 500
0-750 750
0-1000 1000

DC Amperes (50 mV Shunt Rated) Order Model LS-110-X-50MVD

Replace **X** in A Range model number with:

0-10 10
0-15 15
0-20 20
0-30 30
0-40 40
0-50 50
0-75 75
0-100 100
0-150 150
0-200 200
0-300 300
0-400 400
0-500 500
0-600 600
0-750 750
0-800 800
0-1000 1000
0-1200 1200
0-1500 1500
0-2000 2000
0-3000 3000

DC MilliAmperes Order Model LS-110-XMAD

Replace **X** in mA Range model number with:

0-1 1
0-2 2
0-5 5
0-10 10
0-20 20
0-30 30
0-50 50
0-100 100
0-200 200
0-300 300
0-500 500
0-800 800

DC MicroAmperes Order Model LS-110-XUAD

Replace **X** in mA Range model number with:

0-100 100
0-200 200
0-300 300
0-500 500
0-800 800

Suppressed

10-50 10/50
4-20 4/20
1-5 1/5

Power Factor Meters

Power Factor (Single phase, 2-wire) Order Model LS-110-PF1P-12-5A

120 V/5 A input

Power Factor (Three-phase, 3-wire) Order Model LS-110-PF3P3-X-5A

Replace **X** in Input Range model number with:

120 V/5 A 12
240 V/5 A 24
480 V/5 A 48
600 V/5 A 60

Power Factor (Three-phase, 4-wire) Order Model LS-110-PF3P4-X-5A

Replace **X** in Input Range model number with:

120 V/5 A 12
208 V/5 A 20
240 V/5 A 24

DC Voltmeter

DC Volts Order Model LS-110-XVD

V Range	Replace <u>X</u> in model number with:
0-15	15
0-30	30
0-50	50
0-75	75
0-80	80
0-150	150
0-300	300
0-400	400
0-500	500
0-600	600
0-750	750
0-800	800

DC Volts (Zero Center) Order Model LS-110-XVD

V Range	Replace <u>X</u> in model number with:
150-0-150	150-0-150
300-0-300	300-0-300
500-0-500	500-0-500
600-0-600	600-0-600

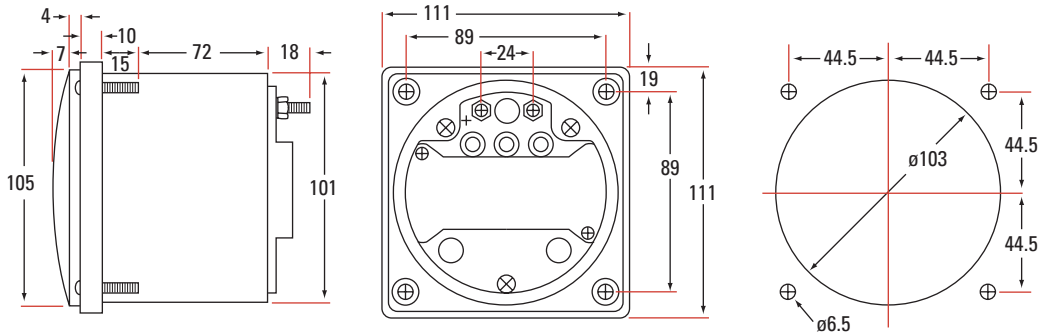
DC Volts (Expanded Scale) Order Model LS-110-110-130VD

110-130 V range

DC MilliVolts (Self-contained) Order Model LS-110-XMVD

mV Range	Replace <u>X</u> in model number with:
0-50	50
0-100	100
50-0-50	50-0-50
100-0-100	100-0-100

Mechanical Dimensions



HOYT

Specification

HOYT believes in continuous product development and reserves the right to modify and alter the specifications contained in this brochure as required, and without notice.

Warranty

HOYT at its discretion, agrees to repair, replace, or refund the purchase price of the products contained herein that are found to be defective in material or workmanship, or do not conform to specifications, if written notice is received by HOYT within 1 year from date of shipment. HOYT assumes no liability, expressed or implied beyond the obligation to repair, replace or refund the purchase price of the defective material.