

# ORP CONTROLLER & TRANSMITTER

Model : ORT 601 - 1



## INTRODUCTION

The ORT 601 - 1 series of ORP Controller and Transmitter provides a reliable method of Monitoring, Controlling & Transmitting 4 - 20mA / RS 485 MODBUS RTU communication for interfacing to PLC, Data logger, HMI, etc.,. This product is suitable to measure ORP in water treatment, Electrolytic water cleaning, Chemical industries, Food process, Waste water treatment, Textile industries & Neutralization process, etc.,.

This ORP Controller & Transmitter can be measured using Industrial platinum ORP sensor. This ORP Controller & Transmitter has many user friendly and safety features which are as follows.

## APPLICATIONS

- Drinking water plant
- RO Water Treatment
- Sewage water
- Food industries
- Pharmaceutical
- Plating
- Healthcare , etc.,.

## FEATURES

- ✓ Economical, easy to calibrate and setup
- ✓ Wide range from -1999 to 1999 ORP
- ✓ High Accuracy
- ✓ Optional isolated RS 485 communication with MODBUS RTU protocol
- ✓ Optional galvanically isolated 4 – 20mA output
- ✓ Very high output impedance  $>10^{12}$  Ohms
- ✓ User selectable single or 2 point calibration
- ✓ 2 relay outputs with configurable individual H/L setting with 6 relay status
- ✓ Optional audible inbuilt buzzer output with front key reset
- ✓ Universal supply voltage 90 to 270V AC/DC

## TECHNICAL SPECIFICATIONS

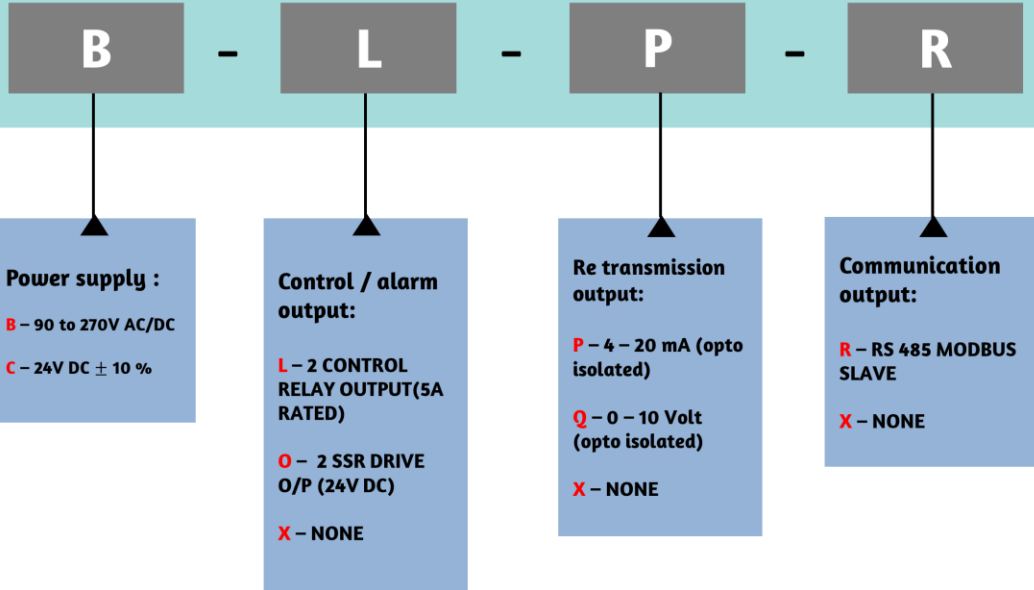
Model	ORT 601-1
Display	4 + 4 Digit 0.5" & 0.39" 7 Seg RED LED Display
Range	-1999 to 1999 ORP
Accuracy	$\pm 1$ ORP $\pm 1$ digit
Resolution	1 ORP
Electrode Input	Platinum Electrode with BNC Attachment
Set Point - 1 & 2	Two Set Point with 6 relay status selectable
Relay Output	Relay - 1 for Setpoint - 1, Relay - 2 for Setpoint - 2 with 5A Rating
Relay Hysteresis	0 to 500 ORP (user adjustable) (only for High & Low control modes)
Relay Cyclic delay	0 to 100 seconds (user adjustable) (only for High & Low control modes)
Input Impedance	$>10^{12}$ Ohms
Alarm Output (optional)	Inbuilt audible buzzer with front key reset
Optional Re. Tx. output	Galvanically Isolated 4 - 20 mA
Optional Comm. output	Isolated RS 485
Comm. Protocol	MODBUS RTU
Operating Environment	-10 to 50°C / 10 to 95 % RH Non Condensing
Power Supply	90 to 270V AC / DC 50Hz
Dimension	96 x 96 x 85 mm
Cutout Dimension	92 x 92 mm
Weight	500 grams (Approx.)

**Note:**

1. Online ORP sensor is Optional. It depends on application, working temperature, type of fitting and cable length
2. Due to continuous product improvements, published specifications may change with out notice

# ORDERING INFORMATION FOR ONLINE ORP CONTROLLER/ TRANSMITTER

MODEL : ORP 601-1 - B - L - P - R



S.NO.	ordering code	power supply	Control / alarm output	Re transmission output	Communication output
1	ORP 601-1-B-L-P-R	90 to 270V AC/DC	2 CONTROL RELAY OUTPUT(5A RATED)	4 - 20 mA (opto isolated)	RS 485 MODBUS SLAVE
2	ORP 601-1-B-L-X-X	90 to 270V AC/DC	2 CONTROL RELAY OUTPUT(5A RATED)	NONE	NONE
3	ORP 601-1-B-L-P-X	90 to 270V AC/DC	2 CONTROL RELAY OUTPUT(5A RATED)	4 - 20 mA (opto isolated)	NONE
4	ORP 601-1-B-X-P-R	90 to 270V AC/DC	NONE	4 - 20 mA (opto isolated)	RS 485 MODBUS SLAVE
5	ORP 601-1-B-X-P-X	90 to 270V AC/DC	NONE	4 - 20 mA (opto isolated)	NONE
6	ORP 601-1-B-X-X-R	90 to 270V AC/DC	NONE	NONE	RS 485 MODBUS SLAVE
7	ORP 601-1-B-X-X-X	90 to 270V AC/DC	NONE	NONE	NONE

## SANSEL INSTRUMENTS AND CONTROLS SANSEL CALIBRATION LABORATORIES

ISO/IEC 17025 Accredited Calibration Laboratory by NABL CC - 2879  
( Thermal, Mechanical, Electro-Technical, Dimension Parameters )

1 / 46 , 3<sup>rd</sup> Main road, Ganga Nagar, MMDA Colony , Maduravoyal , Chennai - 600 095. INDIA  
☎ +91 44 2378 3951, 📞 +91 72999 72085 / 86 / 93, 📠 +91 98401 49928 ✉ enquiry@sansel.net

🌐 [www.sansel.net](http://www.sansel.net)

🌐 [www.sansel.in](http://www.sansel.in)

🌐 [www.sansel.co.in](http://www.sansel.co.in)

🌐 [www.calibrators.in](http://www.calibrators.in)

