TEKLAB Programmable DC Regulated Power Supply is designed as a Constant Current (CC) and Constant Voltage (CV) source for use in laboratories, industries and field testing. With compact size, it provides DC output voltages for Analog and Digital testing. They provide high regulation and stability with either Digital 3-digit LED display for voltage & current is provided to read the values, the unit is equipped with coarse and fine controls for adjusting the voltage.

TECHNICAL SPECIFICATIONS

DC Output	CUSTOMIZED
Output 3 Digit Display	V & I
Meter Accuracy	0.01% Accuracy ±1 Digit
Mode	CV/CC
Constant Voltage Regulation	Line: ±0.1% For ±10% Change in Line Output. Load: ±0.1% ±2mv For Load Change from Zero to Full Load.
Constant Current Regulation	Line: ±0.1% For ±10% Line Change. Load: ±0.1% ±250µa For Change In Output Voltage From 0 Volts to Maximum Output Voltage.
Transient Response	100µsecs To Within 10mv Of Set Output Voltage for Load Change From 10% To 90%.
Stability	Total Drift Within 8 Hours, After Warm-Up. < ±0.2% Plus 5mV In Constant Voltage Mode. < ±0.5% Plus 5mA In Constant Current Mode With Constant Line, Load And Ambient Temperature Conditions.
Ripple & Noise	0.1% - 1%
Protection	SCP/OLP/OVP/RPP
Efficiency	85%
Cooling	Internal Forced Cooling Fan
Input On/Off	MCB
Output Socket	Extended Terminals 4 Mm BTI-30
Operation Temp	0°c to +60°c. 85% Rh
Input Line Voltage	230V Ac ±10% 50Hz, Single Phase
Weight	14 Kg Approx
Dimension W×H×D	270x133x470mm Approx.

CUSTOMISED OUTPUT RANGES ARE AVAILABLE AS PER REQUEST.
FIND THE STANDARD MODELS AND SPECIFICATIONS BELOW

SELECTION GUIDE

a) 6V DC/2A

LHTL0602-PSD-1	OUTPUT SET	V SET 10 TURN POT & I SET 10 TURN POT
	FEEDBACK	V & I 0-10VDC OR 0-5VDC
LHTL0602-PSD-2	OUTPUT SET	ANALOG SIGNAL for VOLT 10V DC OR 0-5V DC and CURRENT 10 TURN POT
	FEEDBACK	NO FEEDBACK
LHTL0602-PSD-3	OUTPUT SET	ANALOG SIGNAL V & I 0-10VDC OR 0-5VDC
	FEEDBACK	NO FEEDBACK
LHTL0602-PSD-4	OUTPUT SET	ANALOG SIGNAL V & I 0-10VDC OR 0-5VDC
	FEEDBACK	V & I 0-10VDC OR 0-5DC
LHTL0602-PSD-5	OUTPUT SET	V SET 10 TURN POT & I SET 10 TURN POT
	FEEDBACK	V OR I 0-10VDC OR 0-5DC
LHTL0602-PSD-6	OUTPUT SET	ANALOG SIGNAL V & I 0-10VDC OR 0-5VDC
	FEEDBACK	V & I 0-10VDC OR 0-5DC
LHTL0602-PSD-7	OUTPUT SET	ANALOG SIGNAL V 0-10V DC OR 0-5VDC, I SET 10 TURN POT
	FEEDBACK	V 0-10V DC OR 0-5V DC
LHTL0602-PSD-8	OUTPUT SET	ANALOG SIGNAL for CURRENT 10V DC OR 0-5V DC and VOLT 10 TURN POT
	FEEDBACK	NO FEEDBACK

b) 60V DC/5A

LHTL605-PSD-1	OUTPUT SET	V SET 10 TURN POT & I SET 10 TURN POT
	FEEDBACK FOR PLC	V & I 0-10VDC OR 0-5VDC
LHTL605-PSD-2	OUTPUT SET FROM PLC	ANALOG SIGNAL V or I 0-10VDC OR 0-5VDC
	FEEDBACK FOR PLC	NO FEEDBACK
LHTL605-PSD-3	OUTPUT SET FROM PLC	ANALOG SIGNAL V & I 0-10VDC OR 0-5VDC
	FEEDBACK FOR PLC	NO FEEDBACK
LHTL605-PSD-4	OUTPUT SET FROM PLC	ANALOG SIGNAL V & I 0-10VDC OR 0-5VDC
	FEEDBACK FOR PLC	V & I 0-10VDC OR 0-5DC

c) 60V DC/10A

LHTL6010-PSD-1	OUTPUT SET	V SET 10 TURN POT & I SET 10 TURN POT
	FEEDBACK FOR PLC	V & I 0-10VDC OR 0-5VDC
LHTL6010-PSD-2	OUTPUT SET FROM PLC	ANALOG SIGNAL V or I 0-10VDC OR 0-5VDC
	FEEDBACK FOR PLC	NO FEEDBACK
LHTL6010-PSD-3	OUTPUT SET FROM PLC	ANALOG SIGNAL V & I 0-10VDC OR 0-5VDC
	FEEDBACK FOR PLC	NO FEEDBACK
LHTL6010-PSD-4	OUTPUT SET FROM PLC	ANALOG SIGNAL V & I 0-10VDC OR 0-5VDC
	FEEDBACK FOR PLC	V & I 0-10VDC OR 0-5DC

d) 18V DC/40A

LHTL1840-PSD-1	OUTPUT SET	V SET 10 TURN POT & I SET 10 TURN POT
	FEEDBACK	V & I 0-10VDC OR 0-5VDC
LHTL1840-PSD-2	OUTPUT SET	ANALOG SIGNAL V or I 0-10VDC OR 0-5VDC
	FEEDBACK	NO FEEDBACK
LHTL1840-PSD-3	OUTPUT SET	ANALOG SIGNAL V & I 0-10VDC OR 0-5VDC
	FEEDBACK	NO FEEDBACK
LHTL1840-PSD-4	OUTPUT SET	ANALOG SIGNAL V & I 0-10VDC OR 0-5VDC
	FEEDBACK	V & I 0-10VDC OR 0-5DC
LHTL1840-PSD-5	OUTPUT SET	V SET 10 TURN POT & I SET 10 TURN POT
	FEEDBACK	V OR I 0-10VDC OR 0-5DC
LHTL1840-PSD-6	OUTPUT SET	ANALOG SIGNAL V & I 0-10VDC OR 0-5VDC
	FEEDBACK	V & I 0-10VDC OR 0-5DC
LHTL1840-PSD-7	OUTPUT SET	ANALOG SIGNAL V 0-10V DC OR 0-5VDC, I SET 10 TURN POT
	FEEDBACK	V 0-10V DC OR 0-5V DC

e) 30V DC/30A

LHTL3030-PSD-1	OUTPUT SET	V SET 10 TURN POT & I SET 10 TURN POT
	FEEDBACK FOR PLC	V & I 0-10VDC OR 0-5VDC
LHTL3030-PSD-2	OUTPUT SET FROM PLC	ANALOG SIGNAL V or I 0-10VDC OR 0-5VDC
	FEEDBACK FOR PLC	NO FEEDBACK
LHTL3030-PSD-3	OUTPUT SET FROM PLC	ANALOG SIGNAL V & I 0-10VDC OR 0-5VDC
	FEEDBACK FOR PLC	NO FEEDBACK
LHTL3030-PSD-4	OUTPUT SET FROM PLC	ANALOG SIGNAL V & I 0-10VDC OR 0-5VDC
	FEEDBACK FOR PLC	V & I 0-10VDC OR 0-5DC

DC REGULATED POWER SUPPLY CONTROLLED BY PLC and FEEDBACK

To control the output Voltage and Current of Variable Power Supplies: -

PLC INPUT SIGNAL (0-10V) will be applied to smart module, which will convert this signal into 0-2.5V and the same will be applied to power supply to control voltage or current. The converted signal is completely isolated from input signal. Output of the power supply (either voltage or current) feedback also will be converted back into 0-10V to know the applied input and result output. Even these signals are isolated from power supply grounds.

For this, op-amps with op to coupler mechanism will be used to achieve complete isolated signals.

INPUT SIGNAL

VOLTAGE: IF PLC INPUT is 10V, we will get output of 30V for 30V@30A power supply, if PLC INPUT is 5V, and output of power supply will be 15V.

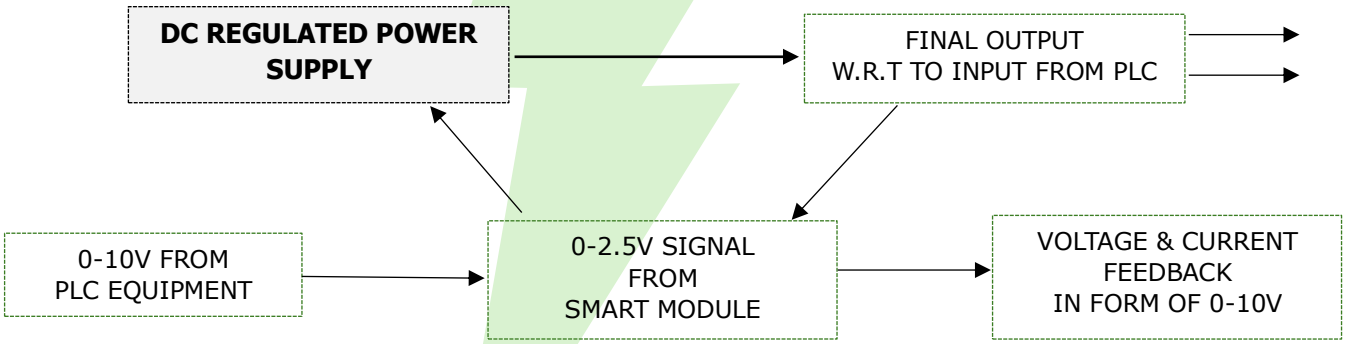
CURRENT: IF PLC INPUT is 10, we will get output of 30A for 30V@30A power supply, if PLC INPUT is 5V, and output of power supply will be 15A

OUTPUT FEEDBACK

VOLTAGE: IF PSU Output Voltage is 30V, we will get current output Feedback for 10V DC, if Output Current is 15V, and output Feedback will be 5V DC.

CURRENT: IF PSU Output Current is 30A, we will get current output Feedback for 10V DC, if Output Current is 15A, and output Feedback will be 5V DC.

Same procedure is applicable for voltage control of power supply. Separate smart module is required for voltage and current control.



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