ENGLISH

Datasheet
Multi-range D.C. Power Supply

Stock No. : 2521601 **Model :** IPS 40-54

CE | GPIB | USB | LabVIEW Driver | Analog Control | LAN

FEATURES

- Output Power Rating : 720W
- Constant Power Output for Multi-Range (V & I) Operation
- C.V/C.C Priority ; Particularly Suitable for the Battery and LED Industry
- Adjustable Slew Rate
- Series and Parallel Operation (2 units in Series/3 units in Parallel Maximum)
- High Efficiency and High Power Density
- 1/3 Rack Mount Size Design (EIA/JIS Standard)
- Standard Interface : LAN, USB, Analog Control Interface
- Optional Interface : GPIB-USB Adaptor
- LabVIEW Driver

The IPS 40-54 is a regulated switching D.C. power supplies with multi-range feature which allows the flexible and efficient configuration of voltage and current within the rated power range. It operates under Constant Current (C.C.) mode or Constant Voltage (C.V.) mode within a wide operating range limited by the output power. To increase power output capacity, the IPS 40-54 can be connected in Series mode to perform double voltage rating or in parallel mode to perform triple current rating for each model. With Multi-Range feature and Series/Parallel connection capability, the IPS 40-54 is a high power density and cost effective equipment for the tests of DC power modules, batteries and components in a broad power range.

IPS 40-54 provides C.C./C.V. Priority Mode, Adjustable Slew Rate, and Output On/Off Delay Functions. C.C. Priority mode can be selected to inhibit the automatic-switch-to-CV-mode caused while the voltage or current is deviated from the original settings. The C.C. and C.V. Priority Selection enables the power supply to prevent the damage of DUT caused by inrush current. Thus, the adjustable slew rate enables user to adjust the rise and fall time of the Voltage and Current, to gain the faster response of the level change. Also, output On/Off delay feature enables users to program the time delays of ON/OFF for each one in case of multiple power supplies are used at the same time.

The IPS 40-54 is equipped with a bleed resistor at the power output terminal, which can quickly discharge the capacitors load when the power supply is turned off and the load is disconnected. Without a bleed resistor, the power output terminal may remain charged with the filter capacitors for some time and be potentially hazardous to the users. In the ATE (Automatic Test Equipment) system, the bleed resistor facilitates the IPS 40-54 quickly being discharged and returned to the “ready” status for the next run after each test. Furthermore, the OVP and OCP protections were equipped within the IPS 40-54. The range of setting condition of both OVP and OCP is from 10% to 110% of rated voltage/current. When any of the protection levels is triggered, the power output will be switched off to protect the DUT.

The panel lock feature is designed to avoid the original settings being changed accidentally. When the power supply turns into PC remote control mode, the panel will be locked automatically; or preventing any operation mistake, users can manually press the “Lock/Local” key to lock the panel. Likewise, if users would like to unlock the panel, then they can press the same button to dissolve the locked panel.

The IPS 40-54 provides USB Host/Device and LAN interfaces as standard and GPIB-USB as optional. The LabVIEW driver and the Data Logging PC software are supported on all available interfaces. An analog control/monitoring connector is also accessible at the rear panel for external control of power On/Off and external monitoring of power output Voltage and Current.

APPLICATIONS

- **Laboratories and Educational Facilities**
- **Product Testing and Quality Assurance**
- **Service Operation and Post-Sales Support**
- **Product Development and Debugging**

SPECIFICATIONS

OUTPUT RATING	
Voltage	0 ~ 40V
Current	0 ~ 54A
Power	720W
REGULATION(CV)	
Load	25mV
Line	23mV
REGULATION(CC)	
Load	59mA
Line	59mA
RIPPLE & NOISE (Noise Bandwidth 20MHz; Ripple Bandwidth=1MHz)	
CV p-p	80mV
CV rms	11mV
CC rms	108mA
PROGRAMMING ACCURACY	
Voltage	0.1% +10mV
Current	0.1% +50mA
READBACK ACCURACY	
Voltage	0.1% +10mV
Current	0.1% +50mA
RESPONSE TIME	
Raise Time	50ms
Fall Time(Full Load)	50ms
Fall Time(No Load)	500ms
Load Transient Recover Time (Load Change from 50~100%)	1ms
PROGRAMMING RESOLUTION (By PC Remote Control Mode)	
Voltage	1mV
Current	2mA
MEASUREMENT RESOLUTION (By PC Remote Control Mode)	
Voltage	1mV
Current	2mA
SERIES AND PARALLEL CAPABILITY	
Parallel Operation	Up to 3 units including the master unit
Series Operation	Up to 2 units including the master unit
PROTECTION FUNCTION	
OVP	4 ~ 44V
OCP	5 ~ 59.4A
OHP	Activated by elecated internal temperatures
FRONT PANEL DISPLAY ACCURACY	
Voltage	0.1%+20mV
Current	0.1%+60mA
ENVIRONMENT CONDITION	
Operation Temp	0°C ~ 50°C
Storage Temp	-25°C ~ 70°C
Operating Humidity	20% to 85% RH; No condensation
Storage Humidity	90% RH or less; No condensation
READ BACK TEMP WEFFICIENT	
Voltage	100ppm/°C of ra ted output voltage, after a 30 minute warm-up.
Current	200ppm/°C of rated output current, after a 30 minute warm-up.
OTHER	
Analog Control	Yes
Interface	USB/LAN/GPIB-USB(Option)/RS232-USB(Option)
Fan	With thermal sensing control
POWER SOURCE	85VA ~ 263VA; 47-63Hz, single phase
DIMENSIONS & WEIGHT	142(W) x 124(H) x 350(D) mm ; Approx. 5.3kg

Specifications subject to change without notice.

ORDERING INFORMATION

IPS 40-54 (0~40V/0~54A/720W) Multi-Range DC Power Supply

ACCESSORIES

User Manual x 1, CD-ROM x 1 (Programmable User Manual), GTL-123 Test Lead x 1, Power Cord x 1 (Region dependent), GTL-240 USB Cable " L " Type x 1,
PSW-004 Basic Accessories Kit x 1
Includes : M4 Terminal screws and washers x 2, Air Filter x 1, Analog control protection dummy x 1, Analog control lock lever x 1, M8 terminal bolts, nuts and washers x 2,

OPTIONAL ACCESSORIES

PSW-001 Accessory Kit
PSW-002 Simple IDC Tool
PSW-003 Contact Removal Tool
PSW-005 Cable for 2 Units of IPS-Series in Series Mode Connection
PSW-006 Cable for 2 Units of IPS-Series in Parallel Mode Connection
PSW-007 Cable for 3 Units of IPS-Series in Parallel Mode Connection
GUG-001 GPIB to USB Adaptor
GRA-410-J Rack Mount Kit (JIS)
GRA-410-E Rack Mount Kit (EIA)
GET-001 Extended Terminal (MAX. 40A)

P. O. Box 99
Corby
Northants NN17 9RS
England
Tel: +44(0) 1536 201234