



Intelligent Protection and Control

Simple Design. Increased Reliability.

Intelligent Protection and Control (iPAC) is a single generator, single utility, soft loading, closed transition transfer pair device. The iPAC utilizes the Schweitzer SEL 451* utility grade relay for all protection and control.

iPAC's design philosophy is centered on incorporating the most trusted name in utility grade protection with digital generator paralleling technology. Combining paralleling logic and control into a proven utility grade device makes your entire power system much more reliable. That reliability is backed by a 10-year warranty on controls and a 2-year warranty on power switchgear sections.**



iPAC from PSSI integrates utility protection and digital generator paralleling control into a reliable and robust utility grade relay. This unique technique results in a control package that eliminates the need for separate paralleling controls (PLC) when paralleling a generator with a utility source, thereby making the overall switchgear and control package very reliable and cost competitive.

INTERFACE

The iPAC interface is simple and user friendly. Front panel membrane buttons make mode selection and breaker operation easy. Bright LED indicating lights illuminate to clearly display system and breaker status. A scrolling back-lit LCD indicates real time utility and generator metering data, system, and protective relay status.

The simplicity of the control's design makes the iPAC suitable to interface with all major generator brands and breaker manufacturers. The iPAC can control as well as protect low and medium voltage transfer pairs. In medium voltage applications, the iPAC also provides overcurrent protection for the utility and generator sources, eliminating the need for expensive overcurrent relays.

COMMUNICATIONS

Every iPAC comes standard with a modem for remote dial-in capability. This means we can dial into your system in minutes, providing you extraordinary factory support when you need it most. In addition, the iPAC is available with optional Web-based web-TOUCH monitoring capability and local HMI touch screens.

Rotating Display (Text)

1. Utility Breaker (Open/Closed)
2. Generator Breaker (Open/Closed)
3. System In (Manual/Auto)
4. Utility Voltage (Normal/Failure)
5. Transition Mode (Open/Closed)
6. Generator (Problem/Normal)
7. DC Voltage (Out of Range/OK)

Rotating Display (Metering)

1. Utility L-N Voltage
2. Utility Current
3. Utility kW
4. Utility Power Factor
5. Breaker 1 (52-U) Current
6. Breaker 2 (52-G) Current

Annunciator Panel/Alarms

- | | |
|--------------------------------|-----|
| 1. System Not In Auto | Red |
| 2. Utility Failure | Red |
| 3. Test Mode | Red |
| 4. Extended Parallel Alarm | Red |
| 5. Utility Locked Out | Red |
| 6. Utility Source Connected | Red |
| 7. Utility Breaker Open | Red |
| 8. Utility Relay Tripped | Red |
| 9. Check GenSet Battery | Red |
| 10. Gen Not in Auto | Red |
| 11. Generator Running | Red |
| 12. Generator Warning | Red |
| 13. Generator Shutdown | Red |
| 14. Generator Source Connected | Red |
| 15. Generator Breaker Open | Red |
| 16. Generator Overcurrent | Red |



AVAILABLE MODES OF OPERATION

- Closed Transition, Soft Transfer
- Closed Transition, Hard Transfer (100ms)
- Open Transition (ATS)

Push Buttons

1. Auto/Manual
2. Open/Closed Transition
3. 52-U Close
4. 52-U Open
5. Test w/Load
6. Bypass Utility Return Timer
7. 52-G Close
8. 52-G Open

SPECIFICATIONS

Breakers (Fixed and Drawout)

Low voltage up to 600V: 800A, 1200A, 1600A, 2000A, 2500A, 3000A, 4000A & 5000A
Medium voltage up to 38kV: 1200A, 2000A, 3000A

Structure

NEMA-1 indoor
NEMA 3R outdoor (walk-in & non walk-in)
Service Entrance on 600V systems

Standards

Up to 600V: UL 891, UL 1558, UL 1008, UL 508A, cUL, CSA
Up to 38kV: Applicable ANSI & NEMA
HMI – Optional
web-TOUCH Remote Monitoring – Optional
NFPA-110 Annunciation – Optional

* Schweitzer SEL 451 is a trademark of Schweitzer Engineering Laboratories, Inc. ** See PSSSI Warranty Statement for details.