

# S&C 15.5-kV and 27-kV IntelliRupter® PulseCloser® Fault Interrupter Quick Operating Guide

## ⚠ WARNING

IntelliRupter PulseCloser Fault Interrupter must be installed, operated, and maintained by qualified persons who are knowledgeable in overhead electric power distribution equipment and the associated hazards. This guide is not a replacement for adequate training and experience in safety procedures for this type of equipment. Read S&C Instruction Sheets 766-510, 766-530, and 766-540 thoroughly and carefully before installing and operating your IntelliRupter PulseCloser Fault Interrupter.



**Interrupter Open/Close/Ready Lever**  
**To open interrupters:**  
 Pull down on right lever. In down position, closing is blocked.  
**To close interrupters:**  
 Power must be available from batteries (if furnished) or energized distribution line. Remove hot line tags, if applicable. Push up on right lever. Then pull down once on left lever for First Closing Profile. Or quickly pull down twice on left lever for Second Closing Profile.



**Hot Line Tag Lever**  
**To manually apply a hot line tag:**  
 Pull down on hot line tag lever.  
**To clear a manually applied hot line tag:**  
 Push up on hot line tag lever.  
**To clear an electronically applied hot line tag when a hot line tag has been applied manually:**  
 Push up on hot line tag lever. Then pull down and push up on hot line tag lever once, without delay.  
**To clear an electronically applied hot line tag when a hot line tag has not been applied manually:**  
 Pull down and push up on hot line tag lever twice, without delay.

**Ground Trip Block Lever**  
 (if furnished)  
**To manually apply ground trip block:**  
 Pull down on ground trip block lever. (When in the applied position the selected elements will be blocked or change as indicated in the setup, see S&C Instruction Sheet 766-530.)  
**To remove a manually applied GTB:**  
 Push up on ground trip block lever. (Placing the ground trip block lever in the up position will not enable any elements that have not been enabled in the active protection profile.)



**Disconnect Operating Lever**  
 (if furnished)  
**To open disconnect:**  
 Place the open/close/ready lever in the Lock open position. Then pull down on right side of disconnect operating lever. Interrupters can now be closed and opened for testing.  
**To close disconnect:**  
 Place the open/close/ready lever in the Lock open position. Then pull down on left side of disconnect operating lever.

**If status indicator is off:**

- If line is not energized, energize the side with integral power module.
- If line is energized, replace protection and control module.

**If status indicator does not indicate Wi-Fi connection:**

- If line is energized, move computer at least 20 feet closer.
- Try another computer furnished with IntelliLink® Setup Software and appropriate security keys.
- Replace communication module.

**If IntelliRupter fault interrupter does not respond to SCADA commands:**

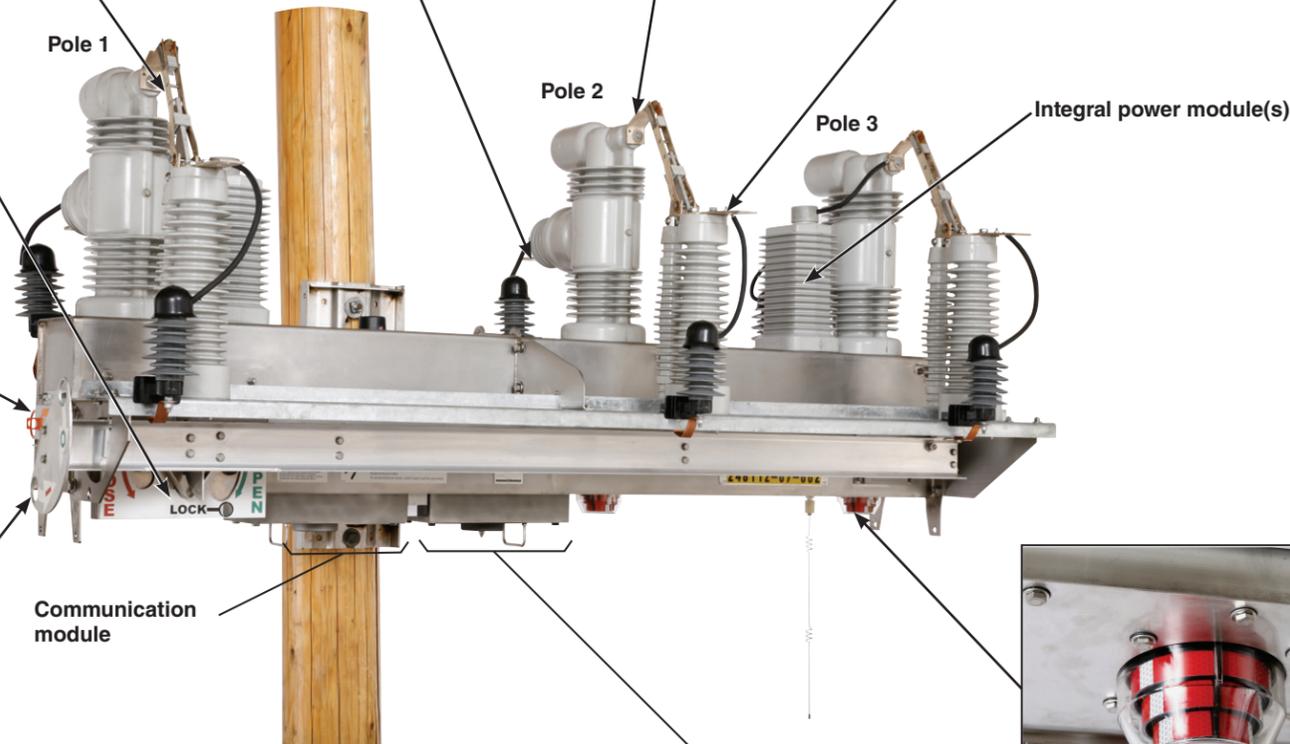
- Enable remote operation (see "IntelliLINK Setup Software Operation—Main" screen). Remove all hot line tags and push up on right interrupter open/close/ready lever.
- Apply local hot line tag. If IntelliRupter fault interrupter does not send a hot line tag status point to SCADA, replace communication module.

Integral disconnect on Disconnect Style IntelliRupter fault interrupter

Lower terminal pad (X)

Upper terminal pad (Y) on Non-Disconnect Style IntelliRupter fault interrupter

Upper terminal pad (Y) on Disconnect Style IntelliRupter fault interrupter



**Interrupter Open/Closed Indicator** (one per pole)  
**Green:** Interrupter open—"O"  
**Red:** Interrupter closed—"I"  
 Colors are reversed on an IntelliRupter fault interrupter furnished with Option "-F2"

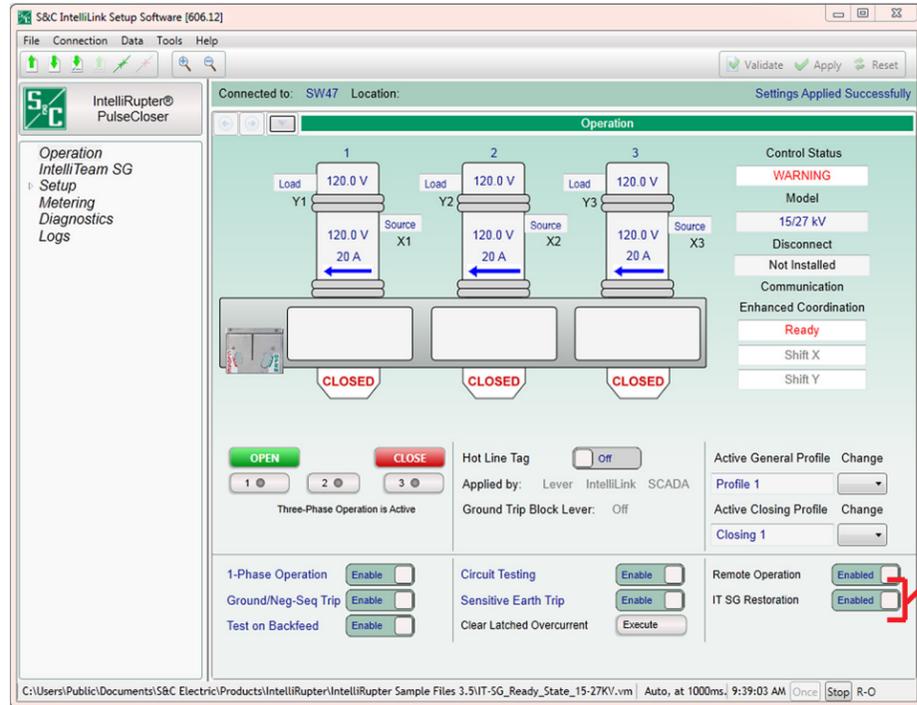
**Protection and Control Module**



**Hot Line Tag Indicator**  
 (amber LED)  
**Flashes for ½ second every 2 seconds:** Hot line tag applied  
**Off:** All hot line tags removed

**Status Indicator** (white LED)  
**Flashes for ½ second every 30 seconds:** Normal operation  
**Pulsates dim to bright:** Wi-Fi connected  
**Flashes for ½ second every second:** Any error state, or a settings mismatch is active  
**Flashes 3 times (½ second on—½ second off) every 30 seconds:** Loop Restoration is timing or Ready, or IntelliTEAM is Ready  
**On 10 seconds, then flashes for ½ second every 30 seconds:** Wi-Fi disconnected, open/close command from interrupter open/close/ready lever, Wi-Fi, or SCADA, or ground trip block lever moved  
**Solid On:** Remote Operation disabled  
**Off:** IntelliRupter fault interrupter not powered, or not functioning properly

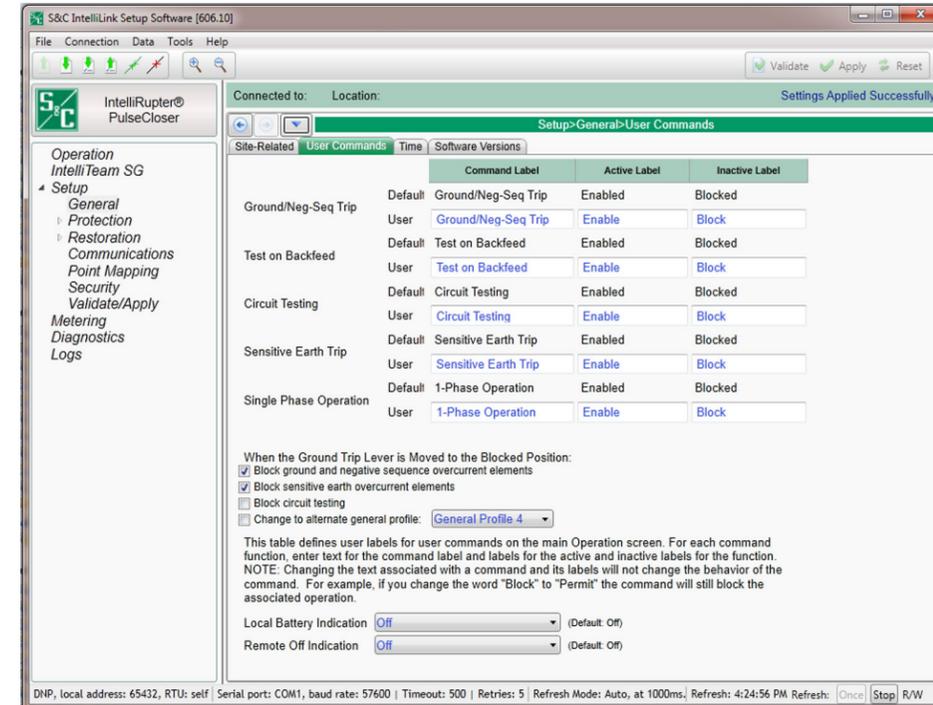




**NOTICE**

To disable automatic load restoration through the IntelliTeam® SG Automatic Restoration System (if furnished), select: **IT SG Operation – Disabled.**

To disable Loop Restoration (if furnished), select: **Loop Restoration – Disabled.**



### IntelliLink® Setup Software: Operation Screen

Match the location of the interrupter open/close/ready lever on the IntelliRupter fault interrupter to the open/close/ready lever on this screen.

- Poles are labeled left to right, configured here as **A, B, and C.**
- X and Y terminal designations are configurable and affect directionality. The default configuration is:  
Upper terminals pads (Y1, Y2, and Y3) are labeled **Y**, and Lower terminal pads (X1, X2, and X3) are labeled **X**.
- Voltage is shown for the three poles at each terminal pad. Phase-to-ground voltage (**1-grd, 2-grd, and 3-grd**), or phase-to-phase voltage (**1-2, 2-3, and 3-1**) can be selected.
- Interrupter open/close indicators match the indicators on IntelliRupter fault interrupter, in this case they are **OPEN**.
- When IntelliRupter fault interrupter has tripped open, the state of each pole is shown, for example: **TESTING-SEF, LOCKOUT-VOLTS** (lockout on voltage trip), or **LOCKOUT-FREQ** (lockout on frequency trip). For **LOCKOUT-OC** (lockout on overcurrent trip), a lightning bolt indicates the faulted phase(s) on the side the fault occurred. The current on each pole at the time of tripping is also shown.
- When IntelliRupter fault interrupter is closed, load current and current direction are shown for each pole.
- **Control Status** shows the status of the protection and control

module (in this case **ALARM**). It may also display: **OKAY, WARNING, ERROR, MAINT MODE, or SETTINGS MISMATCH.**

- **Disconnect** shows the position of the visual disconnect: **OPEN, CLOSED, or Not Installed.**
- **Loop Restoration** or **Communication Enhanced Coordination** status is displayed when either feature is furnished and **Enabled**.
- **OPEN** and **CLOSE** buttons trip and close the interrupters. A single phase can be operated if **Single Phase Operation** is **Active**.
- **Single Phase Operation, Ground Trip Block, and Test on Backfeed** can be enabled or disabled.
- **Hot Line Tag** can be enabled or disabled, and the application method is indicated.
- **Circuit Testing, and Sensitive Earth Trip** can be enabled or disabled.
- **Clear Latched Overcurrent** can be executed.
- **Active General Profile** and **Active Closing Profile** can be selected.
- **Remote Operation** can be enabled or disabled.
- **IT SG Restoration** can be enabled or disabled.
- **Connected to:** and **Location:**—at the top of the screen, show the name and address of the IntelliRupter fault interrupter connected through IntelliLink or IntelliLink Remote software.

### IntelliLink Setup Software: Setup—General—User Commands Screen

- **Enter a Command Label, an Active Label, and an Inactive Label—for every User Command.** These will be displayed on the *Operation* screen. **Text entered for Active or Inactive Labels does not change their functionality.**
- **Ground Trip Blocked Functions**—check to enable desired functionality.
- **Local Battery Indication**—select **On** if a battery is installed, then the Status Indicator on the Control Module will flash  $\frac{1}{2}$  second every second when the battery is Low, Bad, or Disconnected. If no battery is installed, select **Off**.
- **Remote Off Indication**—the Status Indicator on the Control Module can be configured to display **solid on** when **Remote Operation** is disabled.
- **Connected to:** and **Location:**—at the top of the screen, show the name and address of the IntelliRupter fault interrupter connected through IntelliLink or IntelliLink Remote Software.

**NOTICE**

Refer to S&C Instruction Sheet 766-530 for detailed information about IntelliRupter fault interrupter configuration.