

Multilin 8 Series – Application Note



GE's Multilin™ 850 Feeder Protection System is part of the Multilin 8 Series platform of protection relays that share common hardware, firmware and PC Setup Software. Other relays in this platform include the Multilin 869 Motor Protection System, Multilin 845 Transformer Protection System, Multilin 889 Generator Protection System, and will include other protection devices in the future.

Ease of Use through Intuitive Configuration tool and LCD HMI

For the ease of installation the Multilin 850 Feeder Protection System features GE's trademark low-insertion force draw out case design.

Front View



Front panel

The front panel liquid crystal display is a graphical, high resolution color unit. It allows visibility under various lighting conditions. Actual values, alarms, events, phasor diagrams and other useful information are displayed on the front panel display or may be displayed via a PC Connected to the device.

The Multilin 850 features a soft-navigation menu system for easy navigation through information and device setting screens. Five main menu items labeled Targets, Status, Metering, Setpoints and Records located at the bottom of the screen provide quick access to desired device or system information. Choosing a main menu item displays the corresponding sub-menu(s).

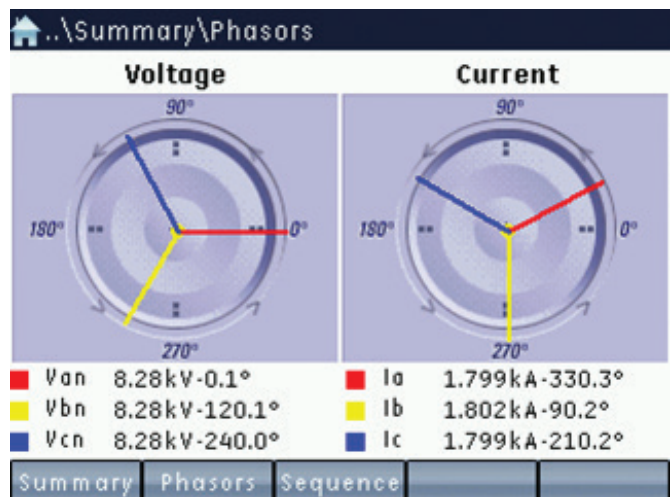


Figure 2.
Metered quantities are conveniently displayed.

The front panel includes 17 LEDs to give operators quick and easy to read identification of relay status and recent device operation. Some

LEDs are hard-coded and some are user programmable. Pushbuttons to control breaker are provided as well.

EnerVista Multilin 8 Series Setup Software



Figure 3. Quick setup options allows setup and configuration of the Multilin 850 in few easy steps.

In addition to the quick setup, a protection summary page is provided which provides an easy-to-read snapshot of element status. In particular, the summary page identifies which elements are enabled and assigned for action. Operators also have the ability to drill down into the settings of each element.

Groups: 1 2 3 4 5 6 I/O Cards: F G

PROTECTION ELEMENTS	GROUP 1		FUNCTION
	F7	F10	
Phase TOC 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Trip
Phase TOC 2	<input type="checkbox"/>	<input type="checkbox"/>	Disabled
Phase IOC 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Trip
Phase IOC 2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Alarm
Neutral TOC 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Trip
Neutral TOC 2	<input type="checkbox"/>	<input type="checkbox"/>	Disabled
Neutral IOC 1	<input type="checkbox"/>	<input type="checkbox"/>	Disabled
Neutral IOC 2	<input type="checkbox"/>	<input type="checkbox"/>	Disabled
Ground TOC 1	<input type="checkbox"/>	<input type="checkbox"/>	Alarm
Ground IOC 1	<input type="checkbox"/>	<input type="checkbox"/>	Disabled
Phase UV 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Trip
Phase UV 2	<input type="checkbox"/>	<input type="checkbox"/>	Disabled
Auxiliary UV 1	<input type="checkbox"/>	<input type="checkbox"/>	Disabled
Auxiliary UV 2	<input type="checkbox"/>	<input type="checkbox"/>	Disabled
Phase OV 1	<input type="checkbox"/>	<input type="checkbox"/>	Disabled
Phase OV 2	<input type="checkbox"/>	<input type="checkbox"/>	Disabled
Auxiliary OV	<input type="checkbox"/>	<input type="checkbox"/>	Disabled
Neutral OV 1	<input type="checkbox"/>	<input type="checkbox"/>	Disabled
Underfrequency 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Trip
Underfrequency 2	<input type="checkbox"/>	<input type="checkbox"/>	Disabled
Underfrequency 3	<input type="checkbox"/>	<input type="checkbox"/>	Disabled
Underfrequency 4	<input type="checkbox"/>	<input type="checkbox"/>	Disabled
Overfrequency 1	<input type="checkbox"/>	<input type="checkbox"/>	Disabled
Overfrequency 2	<input type="checkbox"/>	<input type="checkbox"/>	Disabled

Figure 4. From the protection summary page, it's easy to visualize which elements are assigned to trip or alarm and quickly drill down to these elements settings.