

# L-PRO 4000 Transmission Line Protection Relay

with IEC 61850 station bus protocol

In order to specify and order an ERLPhase relay properly configured for the application, a part number must be constructed as indicated below:

L-PRO 4000 - aa - bb - cccc - d - e - ff

**aa - Model:** \_\_\_\_\_

- 3U: 3U chassis with 9 digital inputs, 14 digital outputs, 12 CT inputs, 6 PT inputs
- 4U: 4U chassis with 20 digital inputs, 21 digital outputs, 12 CT inputs, 6 PT inputs

**bb - Secondary Input Current:** \_\_\_\_\_

- 1A: 1 Amp
- 5A: 5 Amp

**cccc - External Input Rating:** \_\_\_\_\_

- 048: 48/125/250 Vdc set to 48 Vdc
- 125: 48/125/250 Vdc set to 125 Vdc
- 250: 48/125/250 Vdc set to 250 Vdc

**d - Internal Modem:** \_\_\_\_\_

- 0: No internal modem card, standard
- 1: Factory installed modem card

**e - Communications - option for LAN Ports 1 and 2:** \_\_\_\_\_

- 0: C – OP: one copper, one optical
- 1: OP – OP: both optical

C= Copper, RJ45, 100Base-T

OP= Optical 100Base-FX, multimode, 1300 nm, ST style connector

**ff - Operating Frequency:** \_\_\_\_\_

- 50: 50 Hertz
- 60: 60 Hertz

## Example<sup>1</sup>:

L-PRO 4000 - 3U – 5A – 125 – 0 – 1 – 60: This part number specifies an L-PRO 4000 relay 3U chassis with 5 A secondary input current, 125 Vdc rated external inputs, no modem card, with both LAN ports to be used for optical communications, suitable for operation on 60 Hertz system.

## Note 1:

The L-PRO 4000 comes standard in a horizontal mounting chassis with a user manual and the software CD having the latest firmware version.

The Relay Inoperative is set as Normally Closed and user configurable outputs are set as Normally Open.

Please enquire regarding any specific non standard requirements.

## Relay Accessories

A variety of accessories are available from ERLPhase to complement the relay product family. The accessories listed in this section would be individually specified and ordered by part number.

## Communication Accessories:

- 106916 – RuggedCom Ethernet switch (6 port)
- 106917 – RuggedCom LAN modem (DIN rail mount)
- 107081 – RuggedCom LAN modem (rack mount)
- 101787 – Serial Cable, RS232 Cable w/ 9 pin female to 25 pin male connectors
- 101629 – Modem Adapter for use with Serial Cable item # 101787

## User Manuals:

- Additional L-PRO 4000 User Manual and CD