

# Relay Protection GUI Interface



## Overview

This paper describes the hardware implementation of an Interface relay, which is connected at the point of common coupling (PCC) in the micro-grid. This processor-based reference design facilitates a quicker time to market and helps customers design cost-effective, human machine interface (HMI) solutions for protection relay. The system uses fully programmable logic and settings that can be uploaded or downloaded. PCM600 is a user friendly configuration and communication engineering tool for ABB Relion protection and control relays. The user interface, workflow and the IEC 61850 based data model. REX640 is a powerful all-in-one protection and control relay for use in advanced power distribution and generation applications with unmatched flexibility available during the complete life cycle of the device - from ordering of the device, through testing and commissioning to upgrading the. I am seeking to construct a graphical user interface (GUI) utilizing the Arduino GIGA R1 WiFi and GIGA Display Shield boards. However, such developments lead to major protection challenges in distribution systems.

## Article Content

Using the GIGA Display Shield board GUI to interface with 4 Relays ...

The purpose of this interface is to control the Arduino 4 Relays Shield board. Specifically, I aim to implement a functionality where a button on the screen is touched, triggering the activation of ...

NUMERICAL DIFFERENTIAL PROTECTION RELAY - ALIND RELAYS | ALIND RELAYS

Graphical User Interface for analysis. Harmonic analysis, DC analysis and di/dt analysis can be done on the uploaded fault wave forms with facility for report generation.

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Design and Implementation of Differential Relay Based on Graphical ...

Abstract. This paper demonstrates a differential relay (DR) which can be used to protect a power transformer based on the Graphical User Interface (GUI) Matlab program.

PCM600 | ABB

PCM600 is an user friendly configuration and communication engineering tool for ABB Relion protection and control relays . With an intuitive user interface, PCM600 offers configuration capabilities for I/O ...

Adaptive Relay in Microgrid

The work includes the development of a Graphical User Interface (GUI) for the effective utilization of the proposed relay. The various functions implemented in the Interface relay are Synchronization, ...

Using the GIGA Display Shield board GUI to interface ...

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Graphical User Interface for Numerical Protection Relay

GUIs are usually performed through direct manipulation of the graphical elements. GUIs stand in sharp contrast to command line interfaces (CLIs), which use only text and are accessed solely by a ...

Human Machine Interface (HMI) for Protection Relay Reference ...

This reference design showcases a two-dimensional (2-D) Qt graphical user interface (GUI), which is typical for protection relay HMI, along with TI processor capabilities for software-rendered graphics.

### Protective Relay & Communications System

The system uses fully programmable logic and settings that can be uploaded or downloaded using the built-in TCP/IP (electrical or optical) or RS-232 interface. Communicating with the system is done ...

### Product Guide

The user interface has been carefully designed to offer the best situational awareness to the user. Visualization of the primary process measurements, events, alarms and switching objects' statuses ...

### Color Touchscreens Maximize Usability for Protective Relays

An ideal relay user interface is flexible, intuitive, efficient, and easy to use, requiring less time to do tasks and improving work quality by reducing user errors.

Protective relay and human-machine interface therefor

A fully operational digital protective relay or Intelligent Electronic Device (IED) are provided for protecting electrical equipment of a power distribution system. The relay includes an...

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For more information, pricing, or custom solutions, please contact us:

Website: <https://budowasilesia.pl>

Email: [contact@budowasilesia.pl](mailto:contact@budowasilesia.pl)

Phone: +48 537 192 846

Address: ul. Chorzowska 45, 40-001 Katowice, Silesian Voivodeship, Poland

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