

iBOX Kit

The iBOX Kit from GE Energy provides powerful, cost-effective substation and feeder control solutions combining multiple communication ports and protocols, IEC® 61131-3 automation, and local I/O, in a small footprint that is ideal for retrofit and upgrade projects. In addition to the flexibility of the standard iBOX*, this kit provides the added benefits of AC or DC analog inputs, Ethernet, and support for a wide range of power supply input voltages. The iBOX Kit is built on a 19" wall or rack mountable panel.

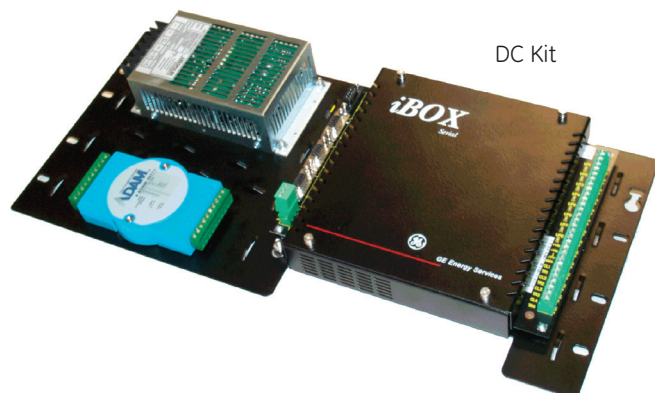
Applications

- Feeder control and monitoring for DA substations.
- Protocol converter.
- LAN enable existing IEDs.
- Custom automation platform (LogicLinX* – IEC61131-3).
- Transformer monitoring.

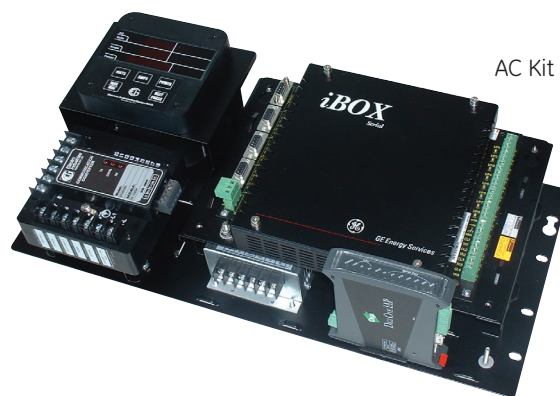
Benefits

- Low cost protocol converter using our comprehensive protocol library enables remote access to real time and non-operational data from a wide variety of substation and feeder IEDs such as protection relays, voltage regulators, recloser controllers, revenue and demand meters and capacitor bank controllers.
- Low unit cost makes it affordable to automate small substations and feeders using GE's library of applications¹. This enables improved system reliability, enhanced utilization and management of substation and network assets, and optimized use of operations and maintenance resources.

¹ For more information on available automation applications refer to "PRPI-048 D20, D25, iBOX Automation Applications."



DC Kit



AC Kit

Features

- Multiple DC analog input options enable monitoring of a wide variety of transducer outputs.
- Direct AC analog input options enable transducer-less monitoring of voltage, current, power and energy.
- Ethernet or serial communications connectivity.
- Vast communication protocol library.
- Wide power supply input range allows easy installation in different environments.



- High current carrying capability of control relays eliminates the need for external interposer relays in many cases.
- Protection against the mis-operation of controls due to single component failures.
- “Select before operate” control procedure issues secure and reliable control operations.
- IEC 61131-3 logic is implemented with the optional Microsoft® Windows®-based LogicLinx soft logic editing tools that enable the user to develop high value automation applications for installation onto the iBOX Substation Kit.
- Demodulated IRIG-B input may be used to ensure accurate SOE event recording.
- Automation applications can include Volt/VAR control, auto-sectionalizing programs, load-shedding applications, auto restoration programs and other feeder and substation automation applications.

Digital Inputs

- 8 optically isolated status/SOE/counter inputs.
- LED indications.

Control Outputs

- 4 Trip/Close pairs or 2 Trip/Close pairs and 2 Form A contacts.
- Separate Master Trip and Master Close relays.
- Protection against erroneous operation due to a single point of failure.
- Select-before-operate (SBO) functionality.

DC Analog Input Option

- 8 DC analog inputs.
- DC voltage options: +/- 1 VDC, +/-5 VDC, +/-10 VDC.
- DC current options: +/- 1 mA, +/-20 mA, 4-20 mA.

AC Analog Input Option

- 3 PTs: 120/208 V.
- 3 CTs: 5 A.

Communications

Protocols:

- DNP3, Modbus® and IEC-870-101 included (many others available as options)
- RS-232/485
- 10/100 BaseT Ethernet option
- Wireless IP Radio ready: serial PPP connection

Power Supply

Input options:

- 20–60 VDC
- 88-264 VAC / 88-360 VDC



For more information about this product visit GEDigitalEnergy.com

Microsoft and Windows are registered trademarks of Microsoft Corporation.
IEC® is claimed as a registered trademark by Commission Electrotechnique Internationale.
Modbus® is claimed as a registered trademark by Gould, Inc.
©2010, General Electric Company. All rights reserved. The contents of this document are the property of General Electric Company. No part of this work may be reproduced or transmitted in any form or by any means, except as permitted in written license agreement with General Electric Company. General Electric Company has made every reasonable attempt to ensure the completeness and accuracy of this document. However, the information contained in this document is subject to change without notice, and does not represent a commitment on the part of General Electric Company. The GE logo is a registered trademark of General Electric Company.