PT2060/96 COMM Communication/ Phase Reference Module

ProvibTech's PT2060/96 COMM communication/ Phase Reference module is a Modbus communication and phase reference module. The PT2060/96 provides one additional Modbus communication port (either RS232 or RS485).

For your PT2060 System, if you require redundant communications or an additional Modbus port, you need to select this module.

✓ Provides additional Modbus communication port either (RS232 or RS485 or Ethernet)

Redundancy in communication

Coupled together with the PT2060/ 91 SIM module the PT2060/96 COMM module provides redundant Modbus communications for the PT2060 system.

Additional communication ports

If additional digital communication ports are required to communicate to other devices (PT2060 system racks, configuration PC, control systems (PLC/DCS) or the PT2060/98 System Display) the PT2060/96 COMM module would be needed.

Specifications

Electrical

Power supply:
   Internally converted by the rack power supply module
   8.0W total typical for each module
LED Indicators:
   OK: green
Modbus communication:
   RS-232 (2): on back panel of module.
   RS-485 (1): on the back panel of module. There is only one active Modbus communication port. The available baud rate values are: 1200, 2400, 4800, 9600, 19.2k, 38.4k and 115.2k baud. RS-485 cable can run up to maximum 1220 meters (4000ft).
   Ethernet port (1): on the back panel of module. 10Mbps, IEEE802.3.
Approvals:
   CE;
   CSA:
      Non-incendive, class I, div.2, GrpABCD, T4

   -40℃ to +75℃
   Certification Number: 2011996

Environmental

Temperature:
   Operation: -20℃ to +65℃
   Storage: -40℃ to +85℃
Humidity:
   95% non-condensing

Physical

Each module comes with two components- the front panel assembly and the back panel assembly.

Dimensions and Location:
   241mm (9.5in) X 24.5mm (0.96in)
   For 19″ rack, they can be mounted in any one slot from 1 to 12.
   For 12″ rack, they can be mounted in any one slot from 1 to 6.
Weight:

1.0 kg (2.0 lbs)

Ordering Information

PT2060/96-AX

  AX: System IO Type

    A0: Modbus RTU RS-485/ RS-232 module with PT2060-009108-A00

    A1: Modbus TCP module

Optional Accessories:

  PT2060-009100

    SCALANCE X-108: 8-port industrial unmanaged Ethernet switch, wide temp. Produced by Siemens Co., Ltd. The switch is used to connect many computers and other network device. It can provide 8 Ethernet ports, and support 10/100M. Provibtech suggests that user should choose two TM900 which provide redundancy 24VDC power for PT2060-009100(SCALANCE X-108).

    Feature:

    Provides 8 Fast Ethernet ports with Auto MDI/MDI-X

    Supports 10/100Mbps Auto Negotiation

    Provides compact size with DIN-rail/ Wallmount

    Supports redundant 18~32 VDC power input

    Diagnosis on device by means of LEDs (power, link status,data traffic) and signal contact

    Simple fault signal contact set-up using the SET button

    Supports wide operating temperatures from -20~70℃

  PT2060-009101

    USB to RS-485 Converter with PT2060-009106-A00 communication Cable.

  PT2060-009102

    USB to RS-232 Converter with PT2060-009107 -A00 cross communication cable.

  PT2060-009103

    RS-485 HUB.

  PT2060-009104-AXX

    Hub to PT2060/91/96 Ethernet internet Cable RJ45

    AXX: Cable length

A00	3 meters	(9.8 feet)
A01	15 meters	(49.2 feet)
A02	75 meters	(246 feet)

  PT2060-009105-AXX

PLC, DCS to Pt2060/91/96 Ethernet direct communication Cable RJ45 Port

  AXX: Cable length

A00	3 meters	(9.8 feet)
A01	15 meters	(49.2 feet)
A02	75 meters	(246 feet)

PT2060-009106-AXX

  USB to RS-485 Converter to PT2060/91/96 serial communication Cable RS-485

  AXX: Cable length

A00	3 meters	(9.8 feet)
A01	15 meters	(49.2 feet)
A02	100 meters	(328 feet)

PT2060-009107-AXX

  PC to PT2060/91/96 cross serial communication Cable RS-232

  AXX: Cable length

A00	1.5 meters	(5 feet)

PT2060-009108-AXX

  PT2060/91/96 to RS485 HUB cable RS-485

  AXX: Cable length

A00	3 meters	(9.8 feet)
A01	15 meters	(49.2 feet)
A02	100 meters	(328 feet)

PT2060-009600-AX

  AX: Panel type

    A0: PT2060/96 Modbus RTU RS-485/ RS-232 Front panel

    A1: PT2060/96 Modbus TCP Front panel

PT2060-009601-AX

  AX: Panel type

    A0: PT2060/96 Modbus RTU RS-485/ RS-232 back panel

    A1: PT2060/96 Modbus TCP back panel

TM900-GX

  TM900 is used to provide 24VDC power with PT2060-009100(SCALANCE X-108), please refer to appendix for detail.

  GX: Mount

    G0: 35mm DIN-rail mount
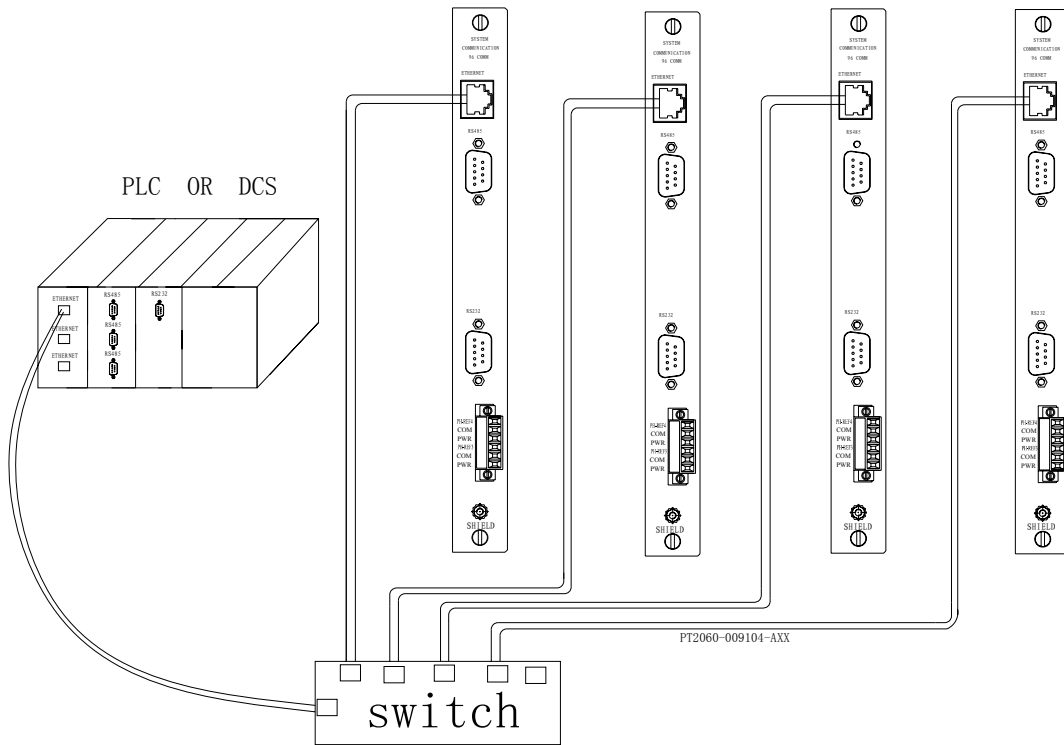
    G1: Plate mount

Back Panel Connectors Layout

Field-wiring Diagram

Modbus TCP for DCS, PLC Communication

PLC   OR   DCS

PT2060-009104-AXX

switch

Modbus RS485 for PLC, DCS Communication

PLC   OR   DCS

PT2060-009108-A00

RS485 HUB

485A
485B

485A
485B

485A
485B

485A
485B