PC to TPU/DPU/GPU 2000R
RS 485 Communication


General Notes

• RS 232 incorporates no Handshaking on the Unicom Device. Jumpers added on PC host to simulate handshake.
• DPU/TPU/GPU offers only 2 - wire RS 485. Pins 58 and 59 are unused.
Reference Materials

- Refer to manuals:
  - Chapter 12 - Instructions DPU 2000R
    Distribution Protection Unit 1MRA587219-MIB (IB 7.11.1.7-4) Issue B.
  - Chapter 12 - Instruction Booklet GPU 2000R
    Generation Protection Unit 1MRA589765-MIB (IB 7.11.1.7-10).
  - Chapter 13 Instructions TPU 2000R
    Transformer Protection Unit 1MRA588372-MIB (IB 7.11.1.7-5)

Unicom Physical Interface
Converter Switch Settings:
- DTE
- RS232-RS485
- 19200 Baud
- HD

Cable "A"
See Attached Diagram

- See Note A.
  - Following Cable Recommended
    Alpha # 58902
    Belden # 9729, # 9829
    Carol #58902

Three-wire cable with
shield. Cable "B" - See Attached Diagram.

Topology Diagram for RS 485 Multi-drop Architecture - if jumpers are inserted
on end units providing for proper termination.

Topology Diagram for RS 485 Multi-drop Architecture - if external resistors are
installed providing proper termination.
Unicom RS232/485 Converter Connection to ABB Protective Relays AN-68A-00

Cable “A” - RS 232 Cable for Connection from the PC to the UNICOM 2500 F Converter.

Unicom 2500-F Converter

PC

3 Receive Data
2 Transmit Data
5 Ground
1 Data Carrier Detect
6 Data Set Ready
4 Data Terminal Ready
7 Request To Send
8 Clear To Send
9 Ring Indicator

DTE

No connection

9 pin D shell
Male Connector

DTE

Cable “B” RS 485 Connection

*Note - Reference the Topology Drawing for Termination configuration if internal or external termination is selected.

*See Note

RS 485 Isolated Port

Shield is isolated

Shield is Frame Grounded at one point

End Unit

Inline Unit

End Unit

Cable “B” RS 485 Connection

*Note - Reference the Topology Drawing for Termination configuration if internal or external termination is selected.

*See Note

RS 485 Isolated Port

Shield is isolated

Shield is Frame Grounded at one point

DPU 2000 End Unit

DPU 2000 Inline Unit

DPU 2000 End Unit
Unicom RS232/485 Converter Connection to ABB Protective Relays AN-68A-00

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