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Cable Connection Configurations

These cable connection configurations help you determine which configuration of cables and interface card you need to order for your particular application.

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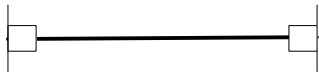
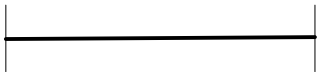
Important: When you have a DH/DH+ trunkline/dropline configuration, you need a 1770-SC at each node.

For approved vendors, see the “Approved Vendor List for DH, DH+, DH-485, and Remote I/O Cables,” publication ICCG-2.2.

The outer diameter for the 1770-CD cable is 6.17 mm (.243 in).

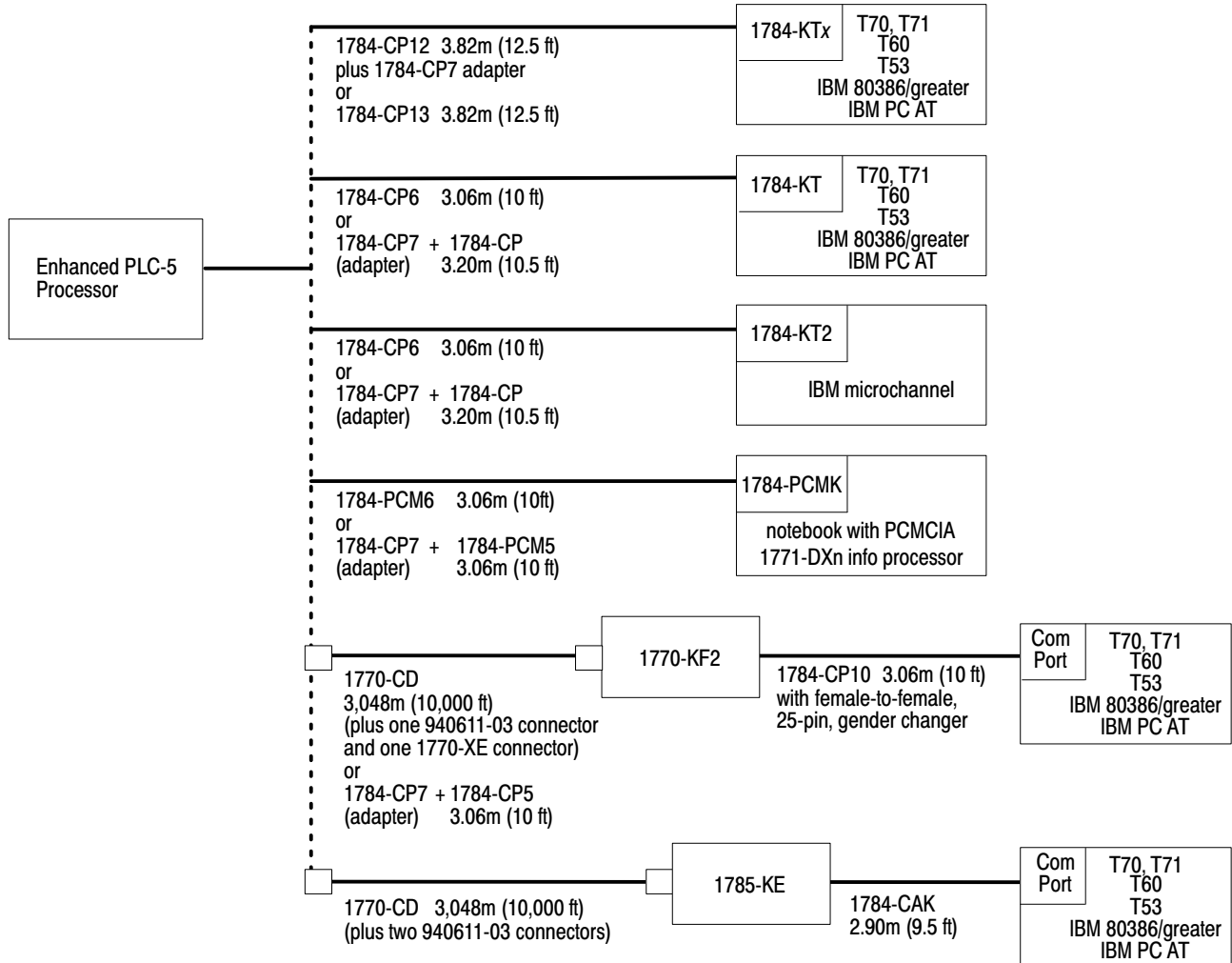
In this section, we use the terms “classic” and “enhanced” PLC-5 processor. The difference between classic and enhanced is described below.

- | | |
|---|--|
| <i>Classic</i> PLC-5 refers to these processors | <i>Enhanced</i> PLC-5 refers to these processors |
| •PLC-5/10 | •PLC-5/11 •PLC-5/40 •PLC-5/60L |
| •PLC-5/12 | •PLC-5/20 •PLC-5/40L •PLC-5/80 |
| •PLC-5/15 | •PLC-5/20E •PLC-5/40E •PLC-5/80E |
| •PLC-5/25 | •PLC-5/30 •PLC-5/60 |

Sometimes we show a cable connection like this:  In this case, the small box at the end of the cable indicates the need for a connector at the end of the cable to make up the full cable assembly.	Sometimes we show a cable connection like this:  In this case, the absence of a small box at the end of the cable indicates the catalog number given represents a full cable assembly that includes connectors or indicates no connectors are needed.
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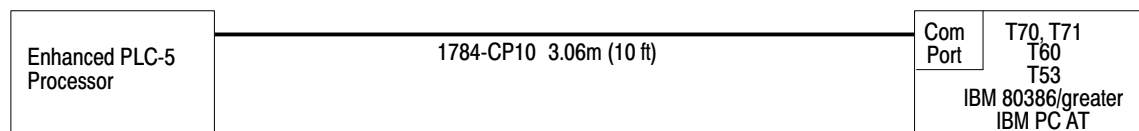
Enhanced PLC-5 Processors to Programming Terminals/Operator Interfaces

Data Highway Plus

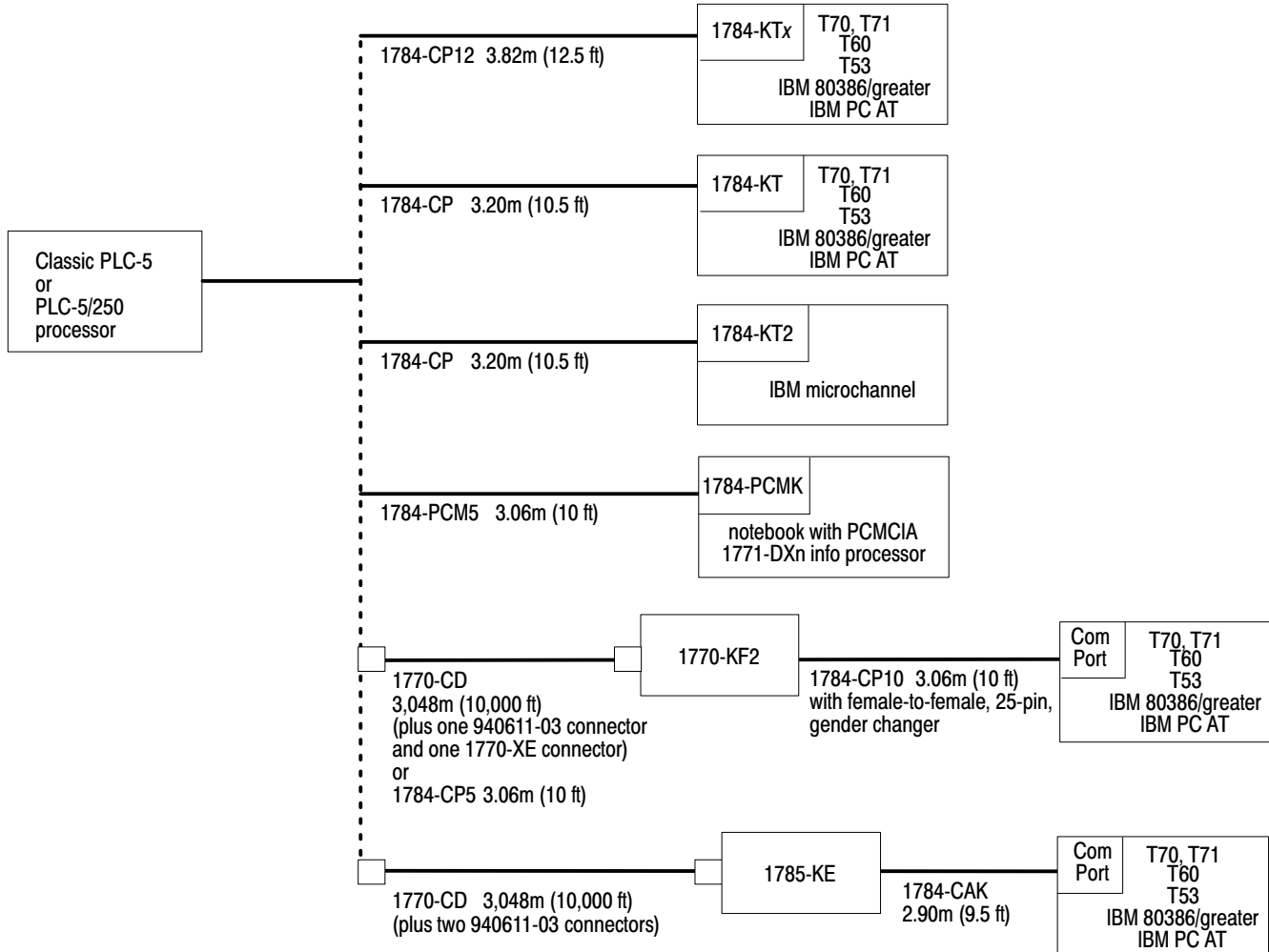


Enhanced PLC-5 Processors to Programming Terminals/Operator Interfaces

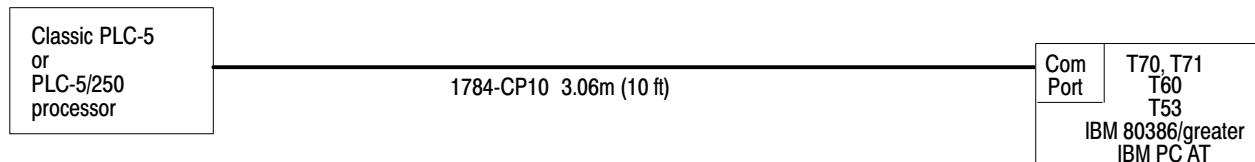
RS-232-C



Classic PLC-5 and PLC-5/250 Processors to Programming Terminals/Operator Interfaces Data Highway Plus

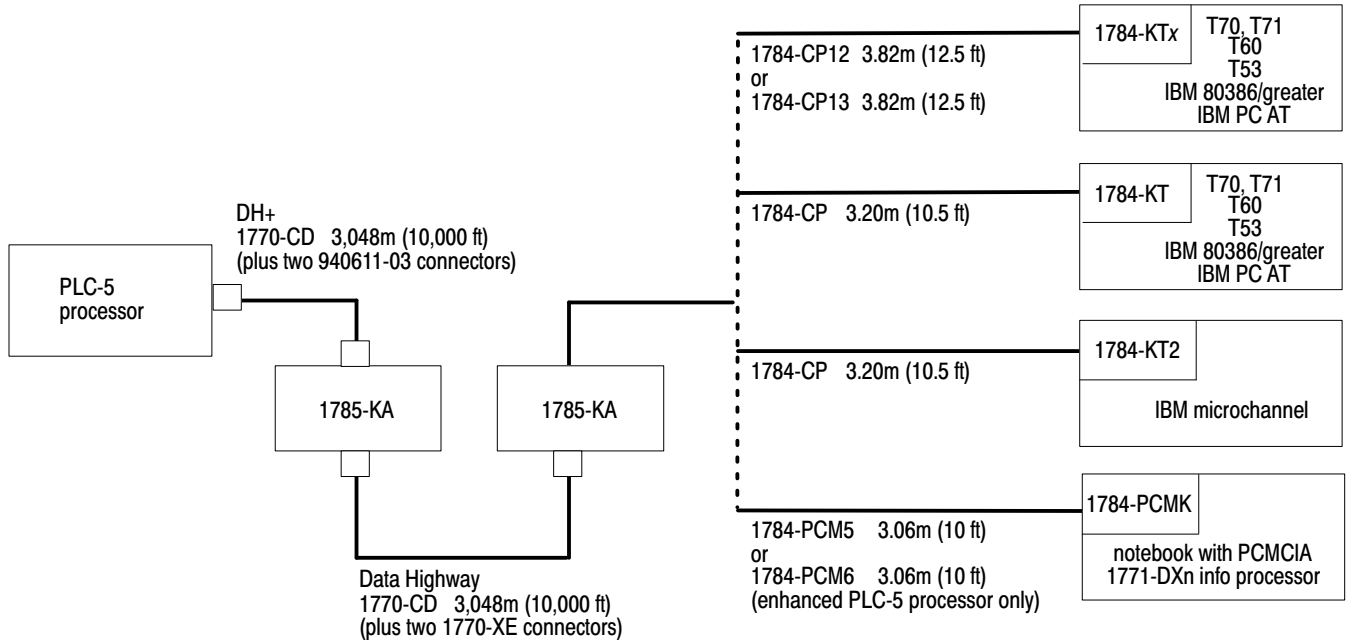


Classic PLC-5 and PLC-5/250 Processors to Programming Terminals/Operator Interfaces RS-232-C



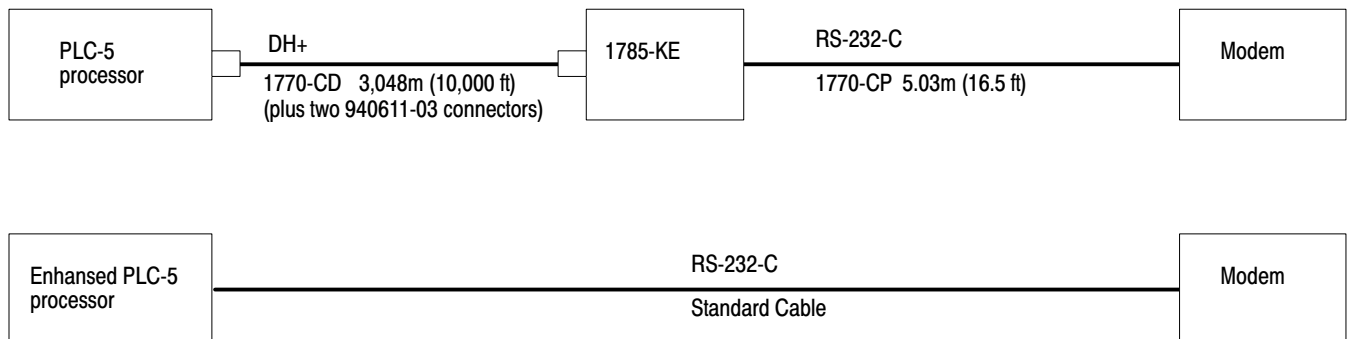
Enhanced and Classic PLC-5 Processors and PLC-5/250 Processors to Programming Terminals/Operator Interfaces

Remote Data Highway Plus

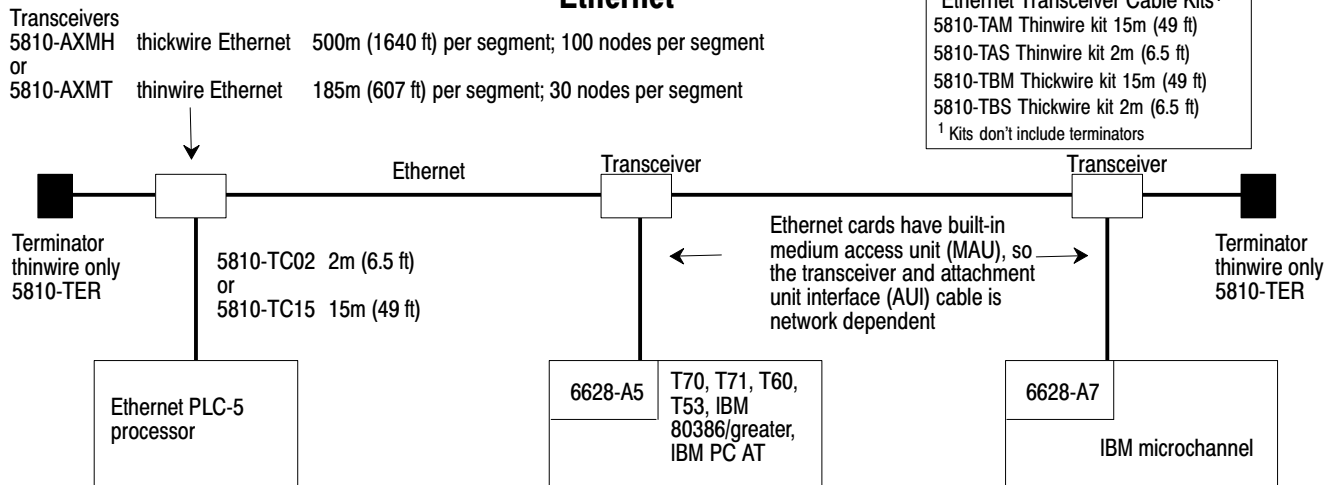


Enhanced and Classic PLC-5 Processors to Modems

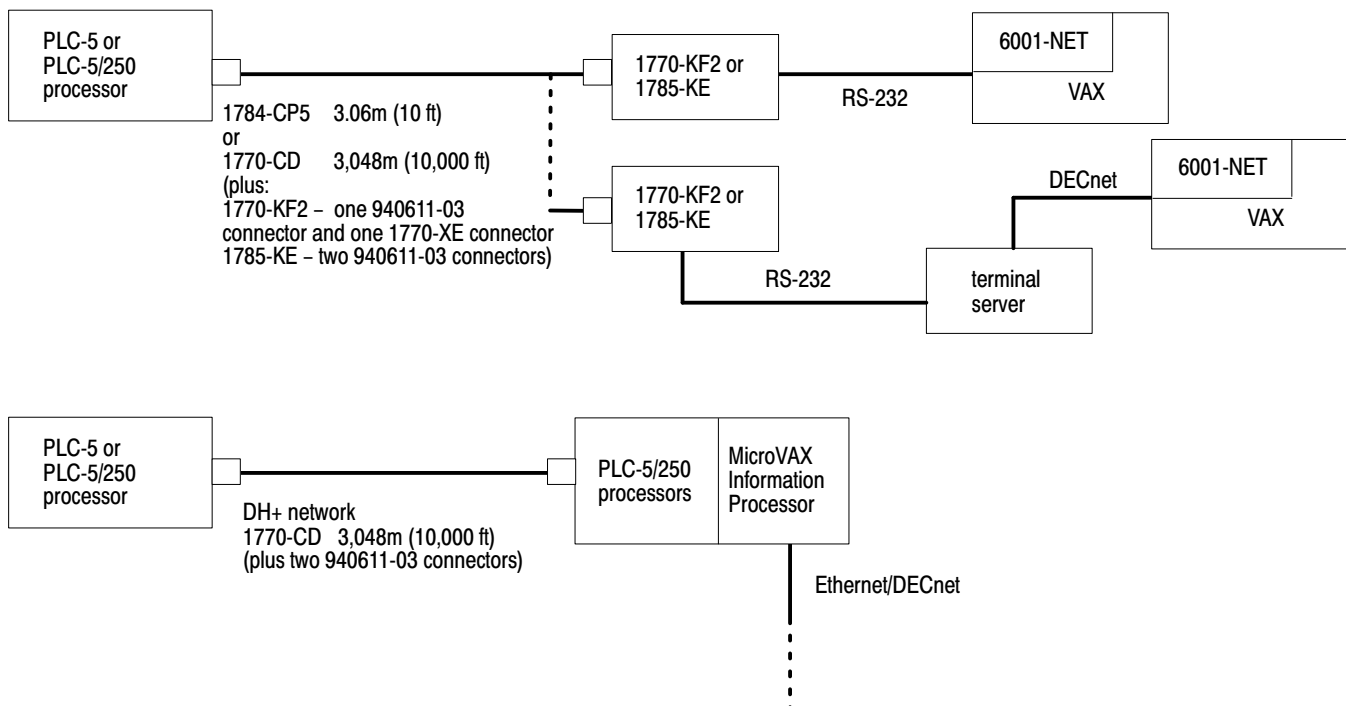
RS-232-C



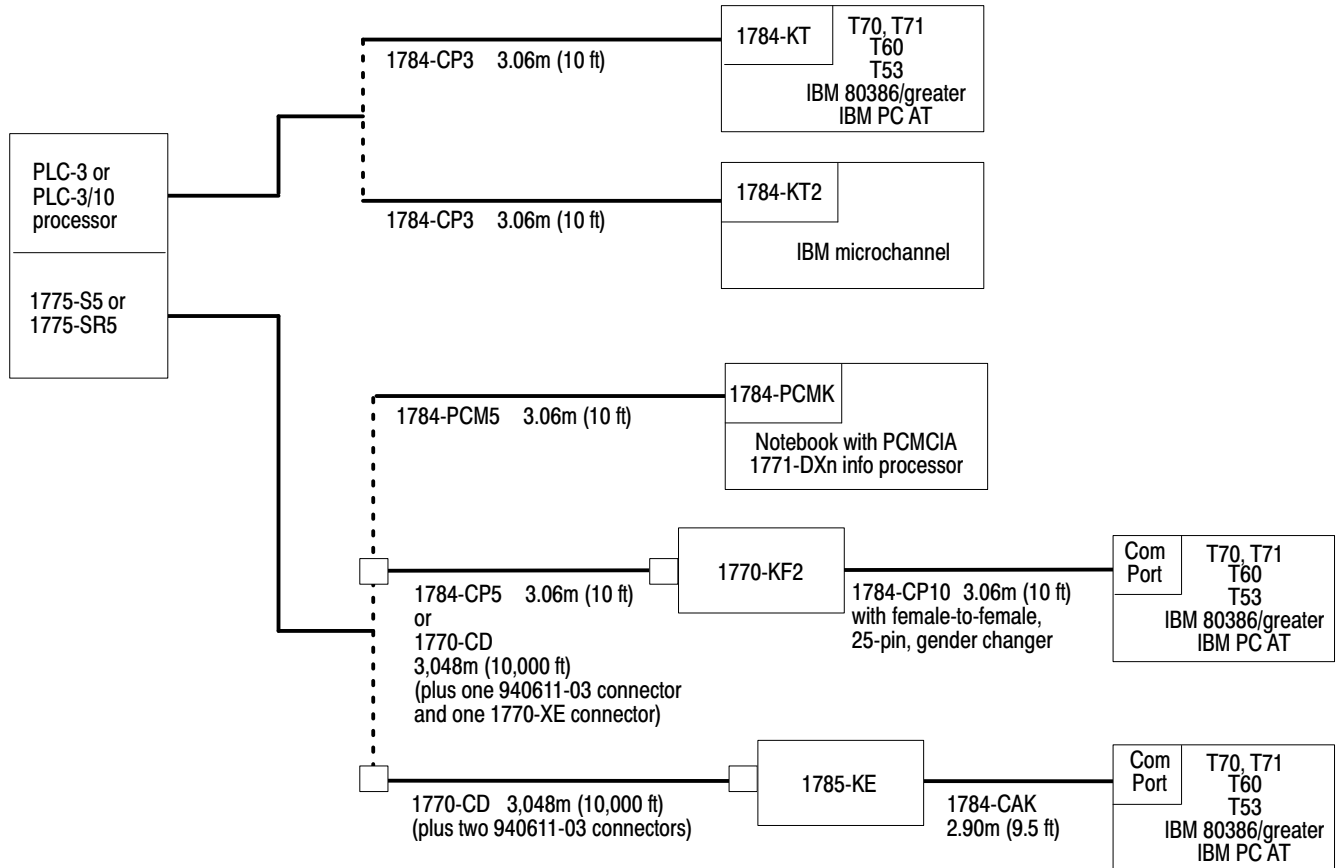
Ethernet PLC-5 Processors to Programming Terminals/Operator Interfaces



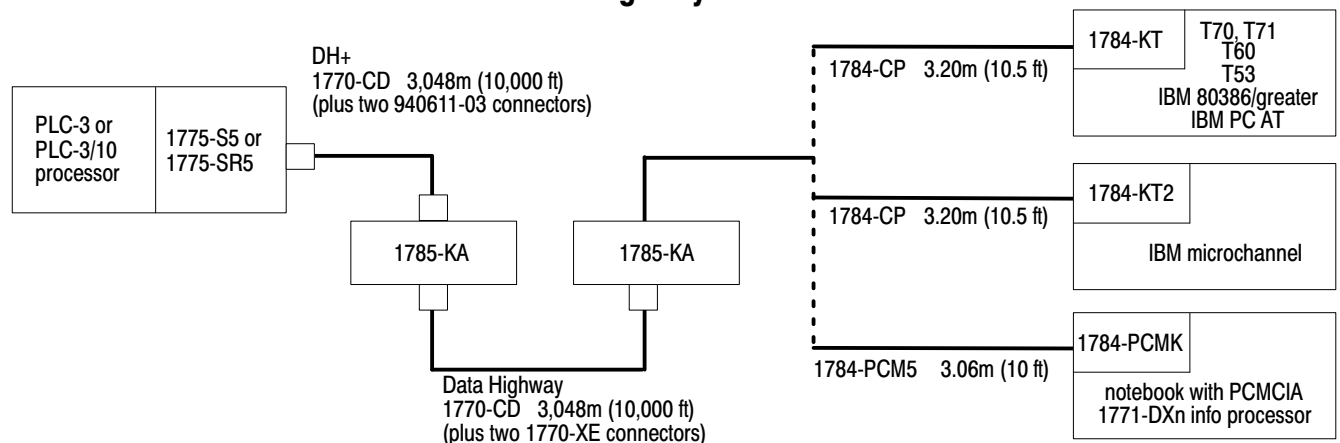
PLC-5 and PLC-5/250 Processors to VAX Data Highway Plus Network



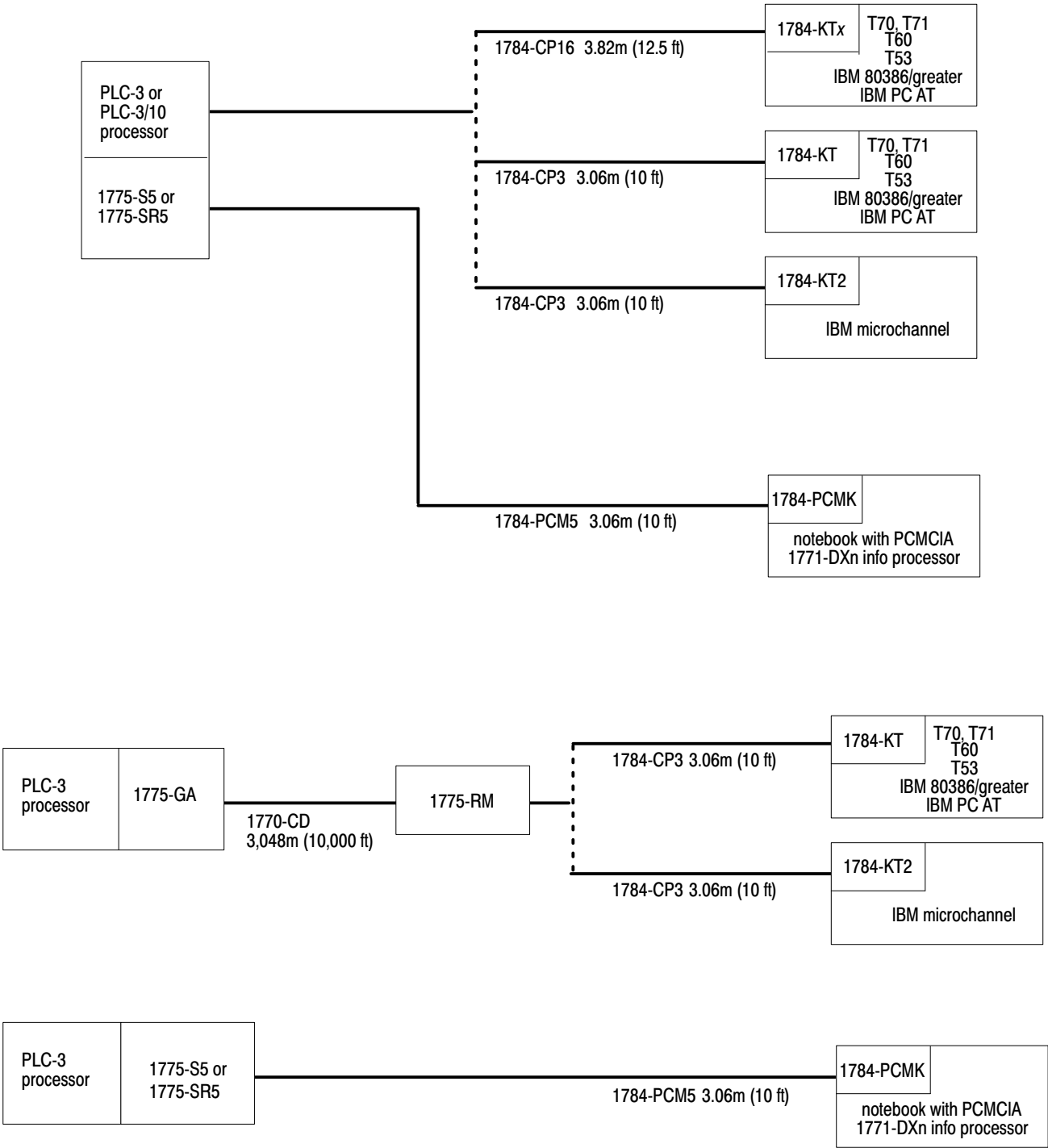
PLC-3 and PLC-3/10 Processors to Programming Terminals/Operator Interfaces Data Highway Plus Network



PLC-3 and PLC-3/10 Processors to Programming Terminals/Operator Interfaces Remote Data Highway Plus Network

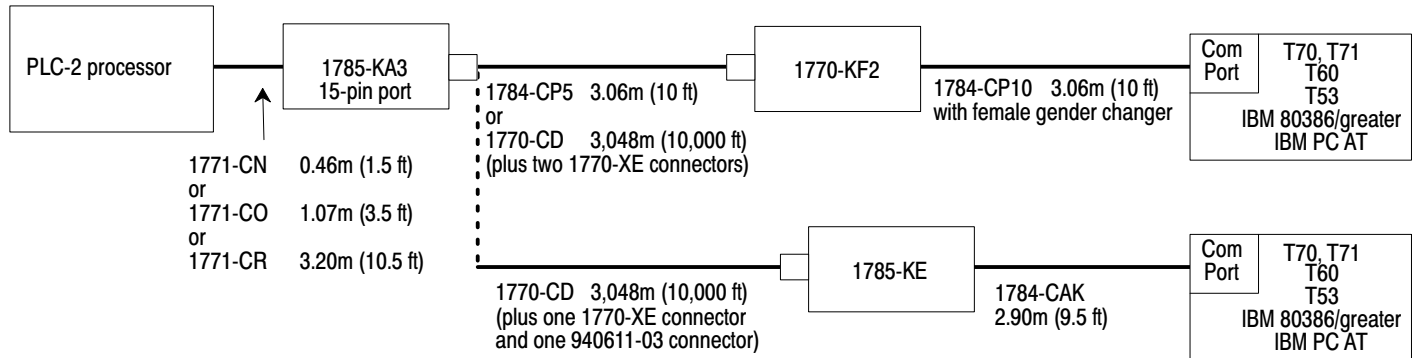


PLC-3 and PLC-3/10 Processors to Programming Terminals/Operator Interfaces
Direct



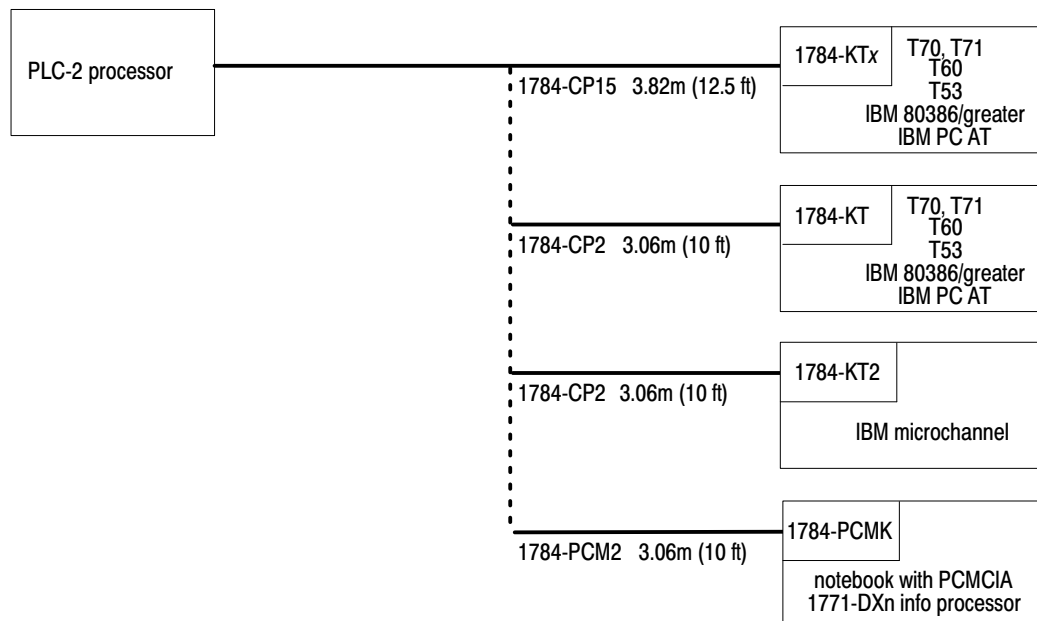
PLC-2 Processors to Programming Terminals/Operator Interfaces

Data Highway Plus Network



PLC-2 Processors to Programming Terminals/Operator Interfaces

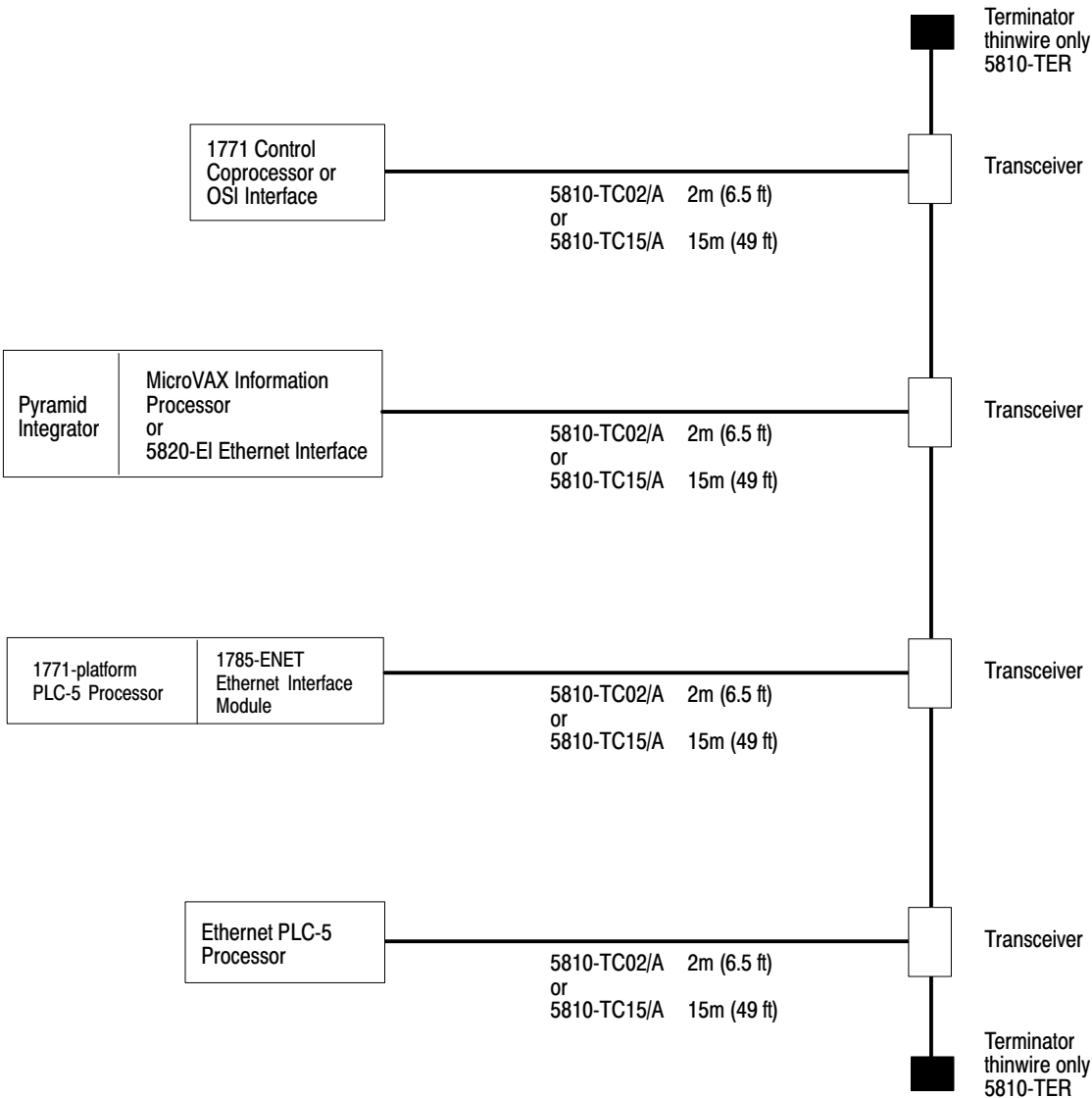
Direct



PLC Processor to PLC Processor
Ethernet

Ethernet Transceiver Cable Kits ¹
5810-TAM Thinwire kit 15m (49 ft)
5810-TAS Thinwire kit 2m (6.5 ft)
5810-TBM Thickwire kit 15m (49 ft)
5810-TBS Thickwire kit 2m (6.5 ft)
¹Kits don't include terminators

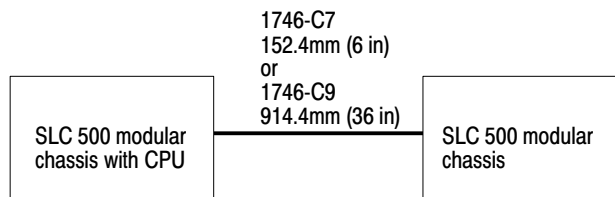
Transceivers
5810-AXMH thickwire Ethernet 500m (1640 ft) per segment; 100 nodes per segment
or
5810-AXMT thinwire Ethernet 185m (607 ft) per segment; 30 nodes per segment



SLC Chassis to SLC Chassis

SLC Chassis $\blacktriangleleft$ Chassis Bus $\blacktriangleright$ SLC Chassis

SLC Chassis to SLC Chassis Chassis Bus Connection¹

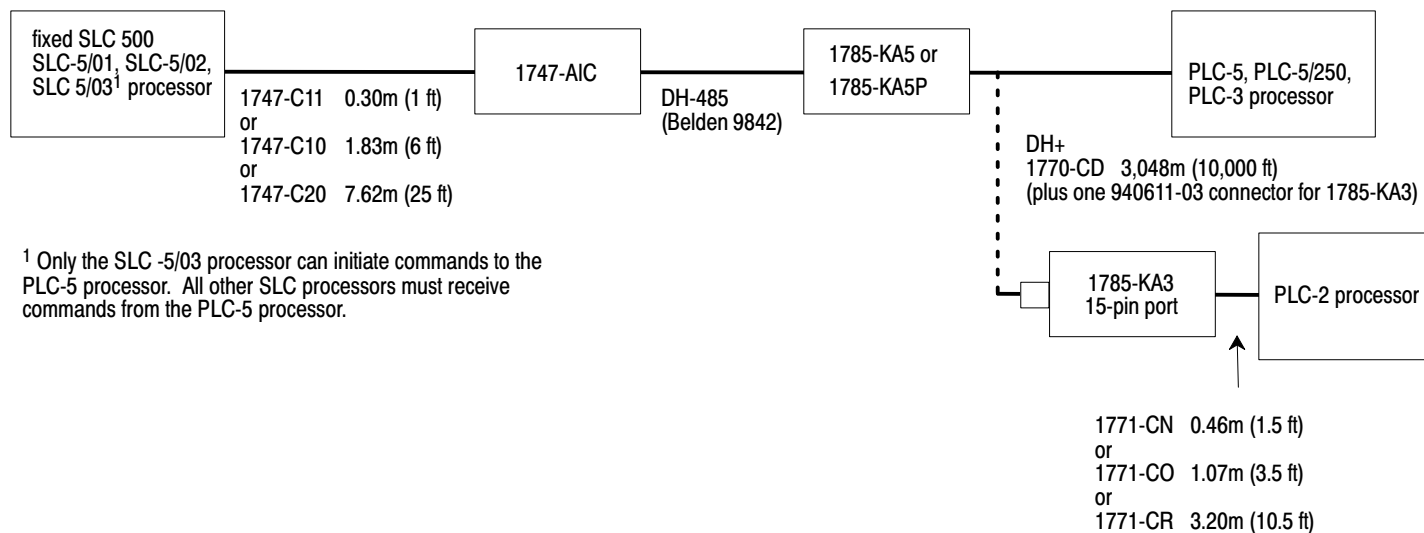


¹ You can connect a maximum of 3 chassis or 30 slots.

SLC Processor to PLC Processor

SLC Processor $\blacktriangleleft$ DH-485 to Data Highway Plus $\blacktriangleright$ PLC Processor

SLC/PLC Connections DH-485 to Data Highway Plus Network

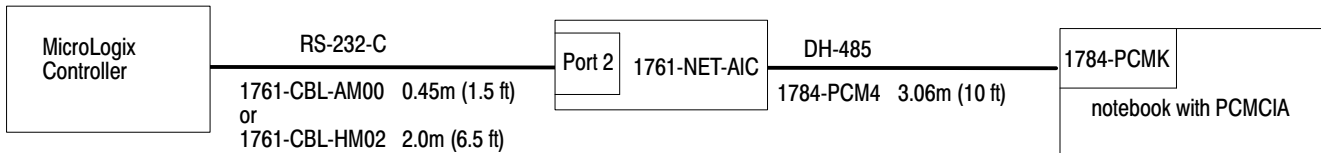
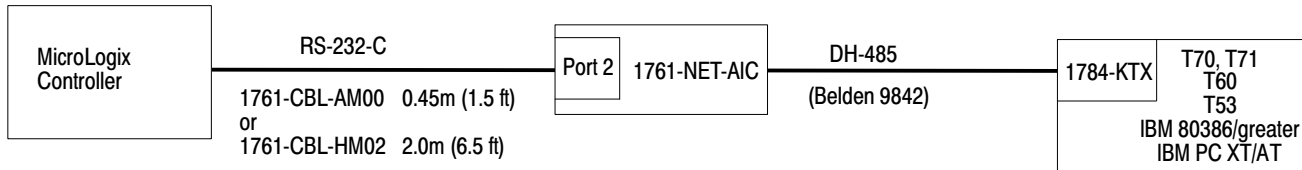
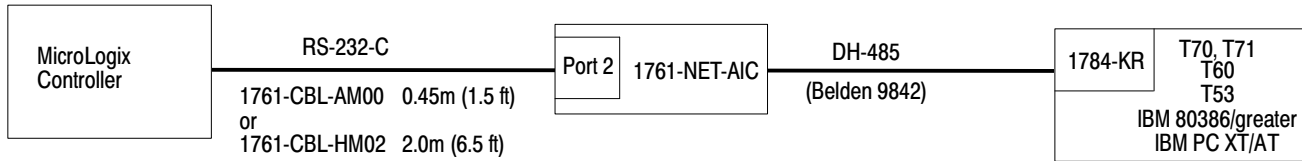


¹ Only the SLC -5/03 processor can initiate commands to the PLC-5 processor. All other SLC processors must receive commands from the PLC-5 processor.

MicroLogix 1000 Programmable Controllers to Terminals/OI/PCs

MicroLogix 1000 Programmable Controller ◆ DH-485 ◆ Terminals/OI/PCs

MicroLogix Programmable Controllers to Programming Terminals/Operator Interfaces DH-485

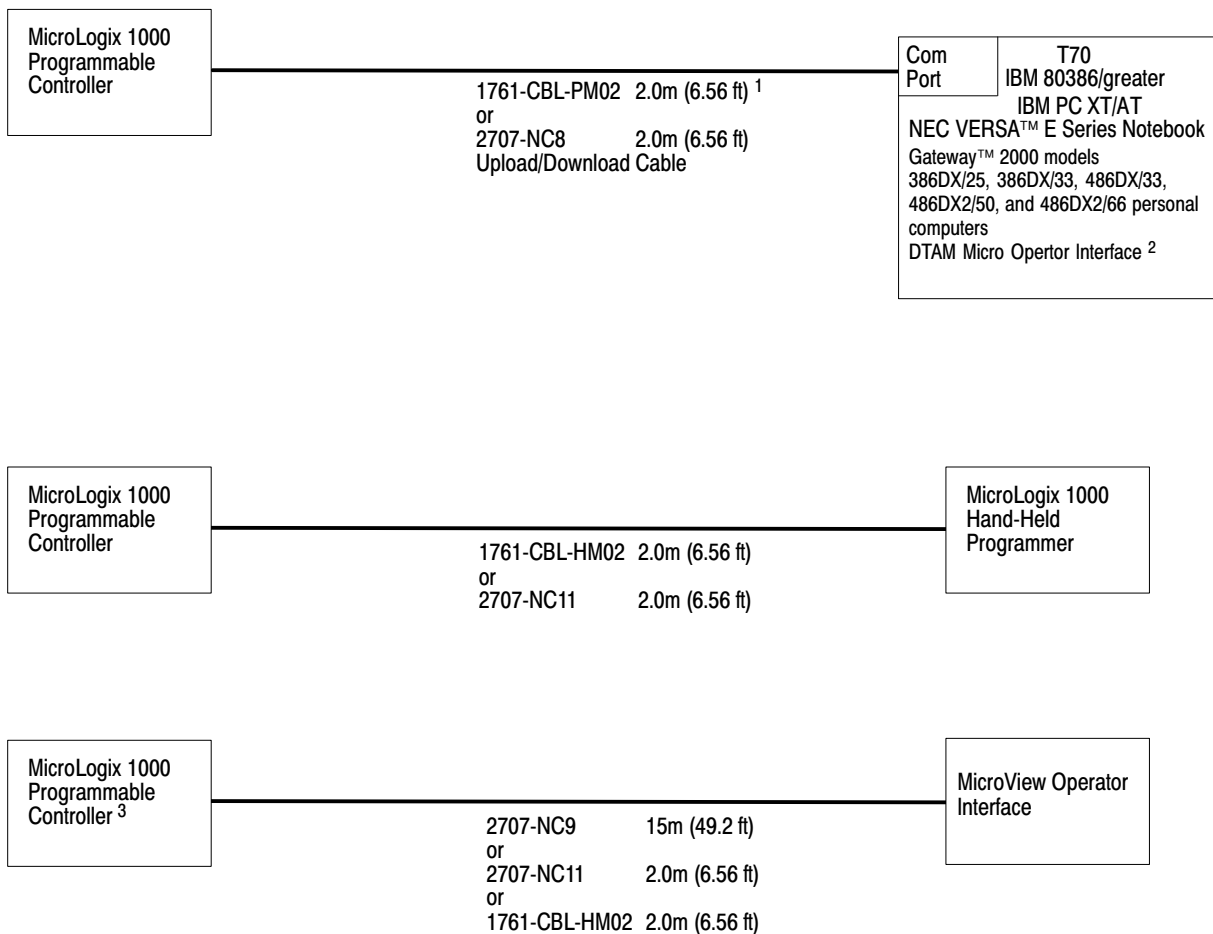


MicroLogix 1000 Programmable Controllers to Terminals/OI/PCs

MicroLogix 1000 Programmable Controller ♦ RS-232-C ♦ Terminals/OI/PCs

MicroLogix Programmable Controllers to Programming Terminals/Operator Interfaces/ Personal Computer/Hand-Held Programmer

RS-232-C

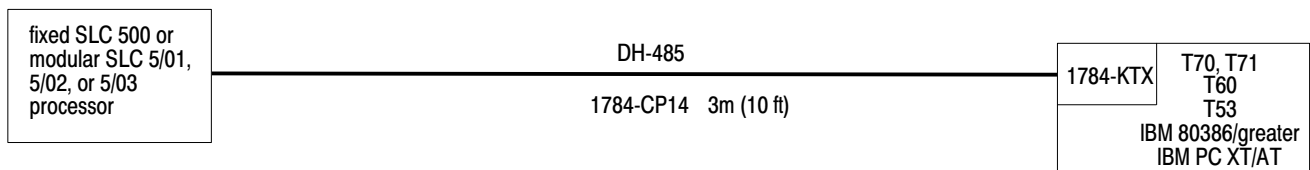
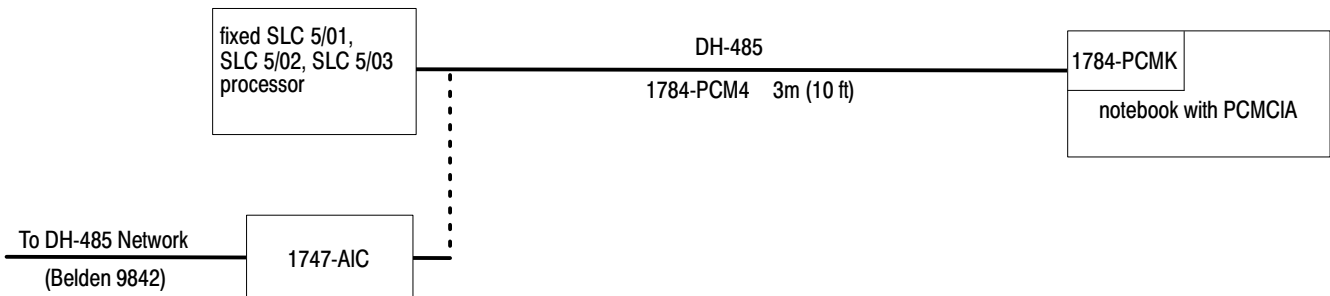
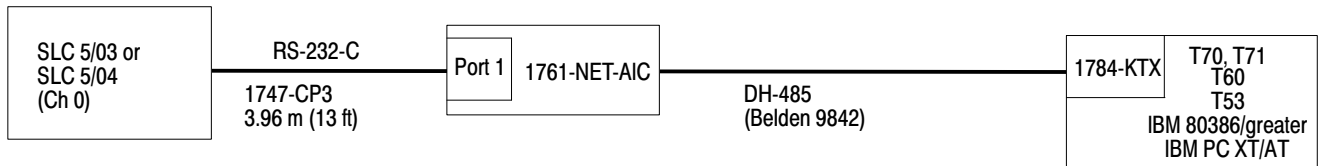
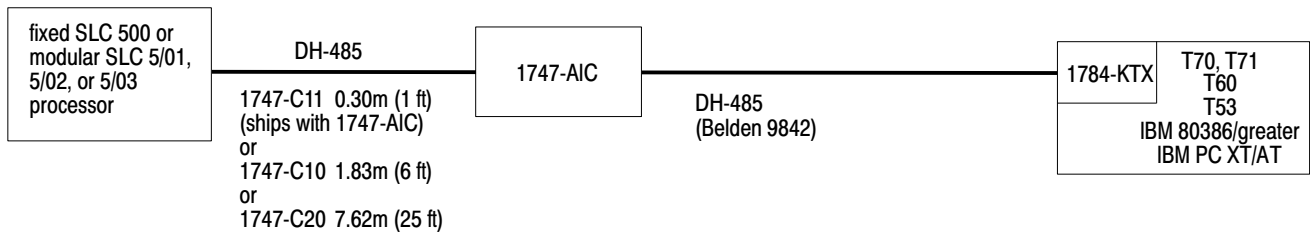
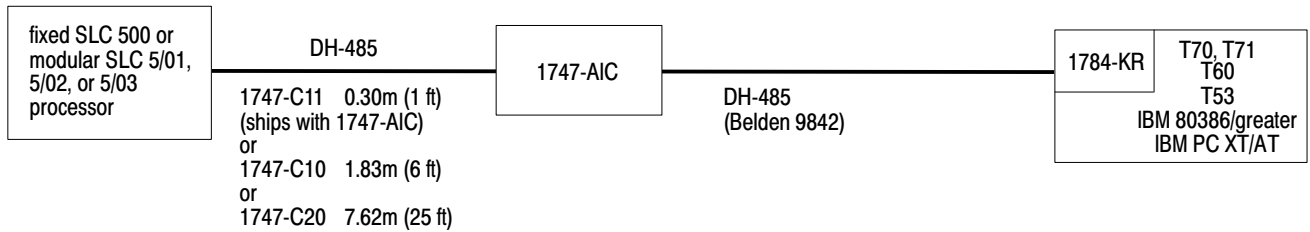


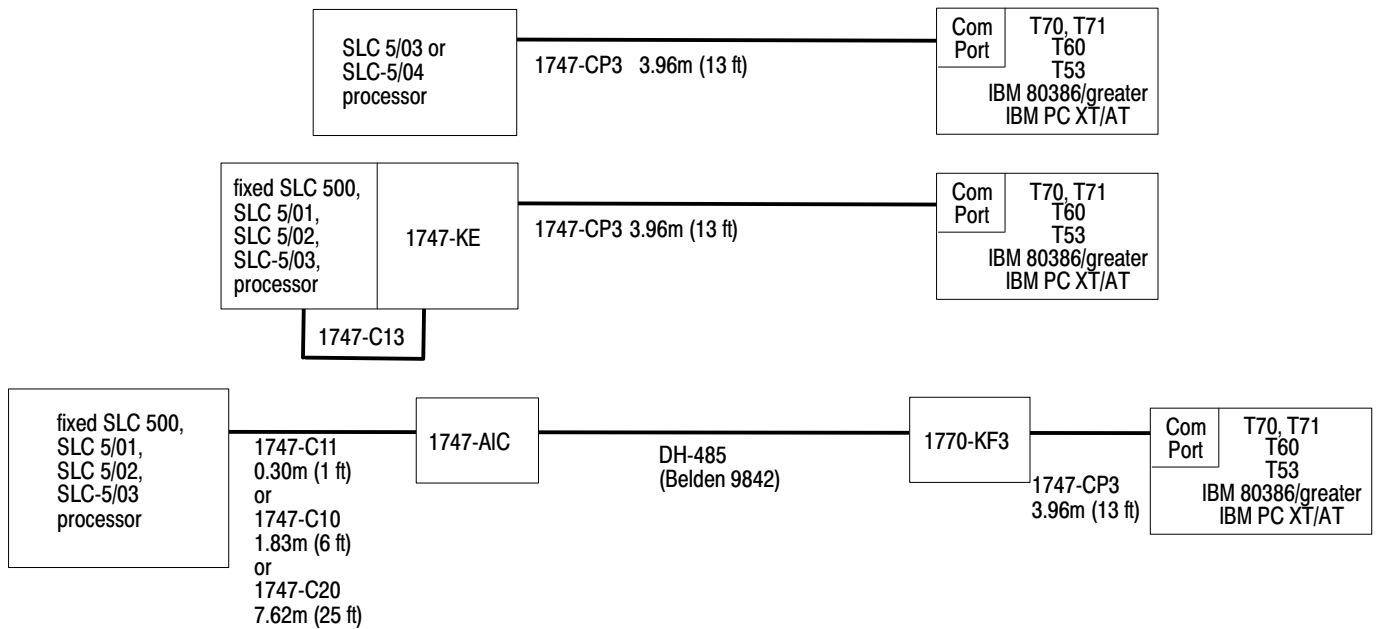
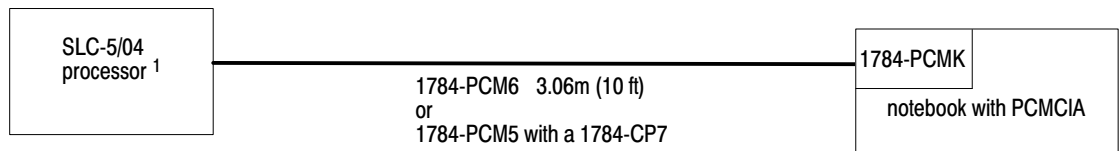
¹ The connector is at a 90° angle.

² You can also use the 2707-NC10 to connect a MicroLogix Programmable Controller to a DTAM Micro operator interface.

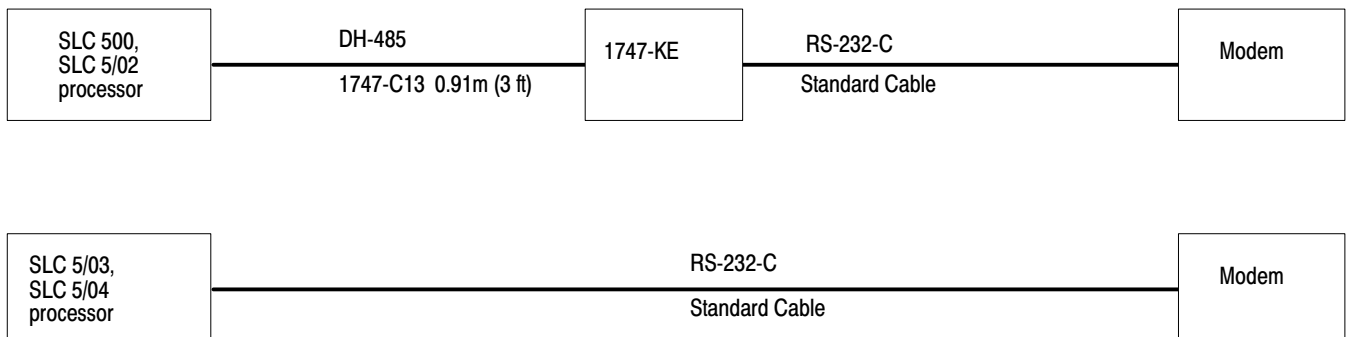
³ When you use the MicroLogix 1000 Programmable Controller to download a program to the MicroView operator interface, you must use an external power supply.

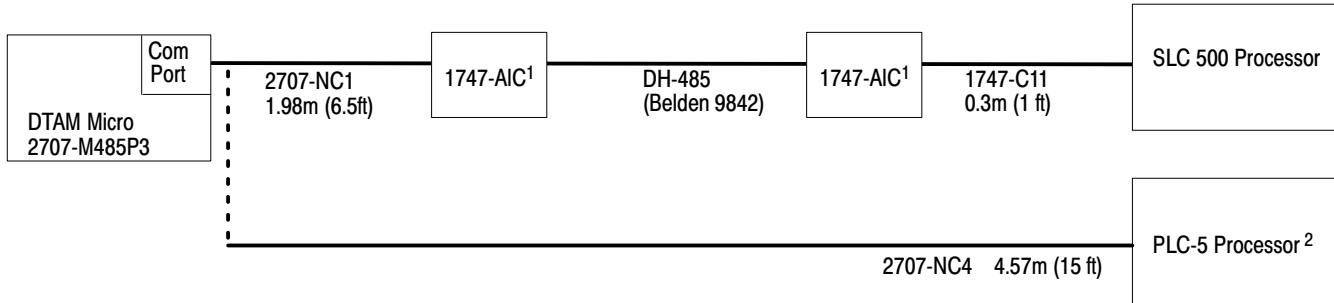
SLC 500 Processors to Programming Terminals/Operator Interfaces DH-485



SLC Processors to Terminals/OI/ModemsSLC 500 $\blacktriangleleft$ RS-232-C & Data Highway Plus $\blacktriangleright$ Terminals/OI/Modems**SLC 500 Processors to Programming Terminals/Operator Interfaces
RS-232-C****SLC 500 Processors to Programming Terminals/Operator Interfaces
Data Highway Plus Network**

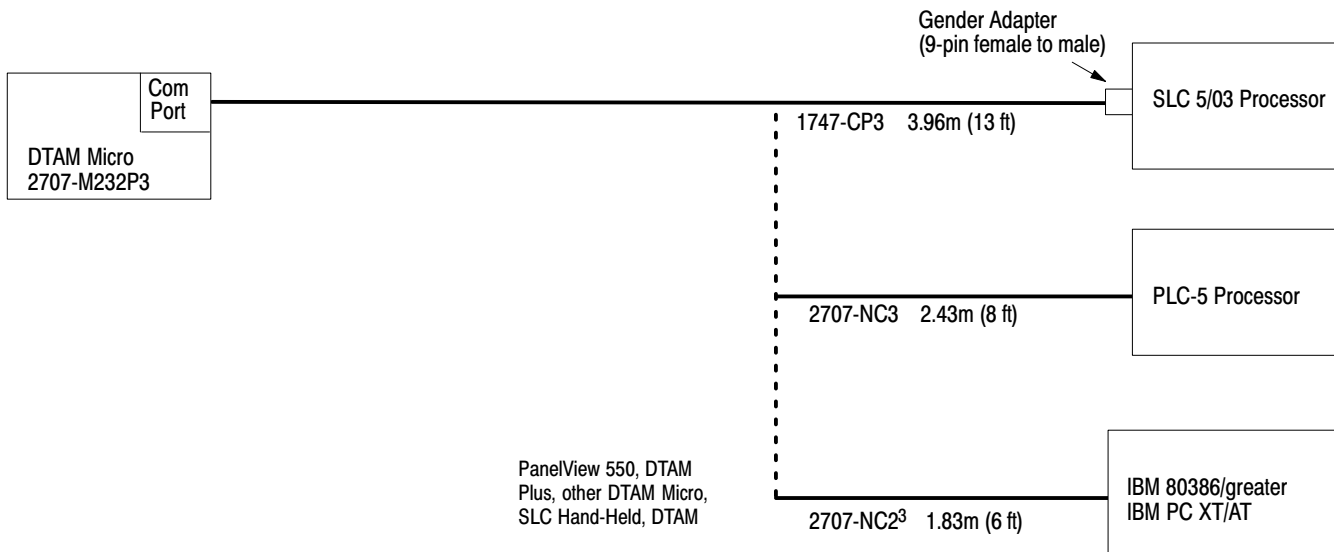
¹ Although the SLC 5/04 processor has a 9-pin D-shell serial port, you cannot use the 1785-PCM5 cable to connect it to the 1784-PCMK.

**SLC 500 Processors to Modems
RS-232-C**

DTAM Micro Operator Interface to SLC or PLC Processor/OI/PCDTAM Micro $\blacktriangleleft$ DH485 & RS-232-C $\blacktriangleright$ SLC or PLC Processor**DTAM Micro Operator Interface
DH-485**

¹ Electrical isolation using Link Couplers is required in applications where the distance between the DTAM Micro terminal and the SLC processor is greater than 2 m (6.5 ft).

² The DTAM Micro RS-485 port supports RS-422 communication with the PLC-5 processor. RS-422 communication is limited by the PLC processor to 19.2k bit/s and a distance of 61 m (200 ft).

**DTAM Micro Operator Interface
RS-232-C**

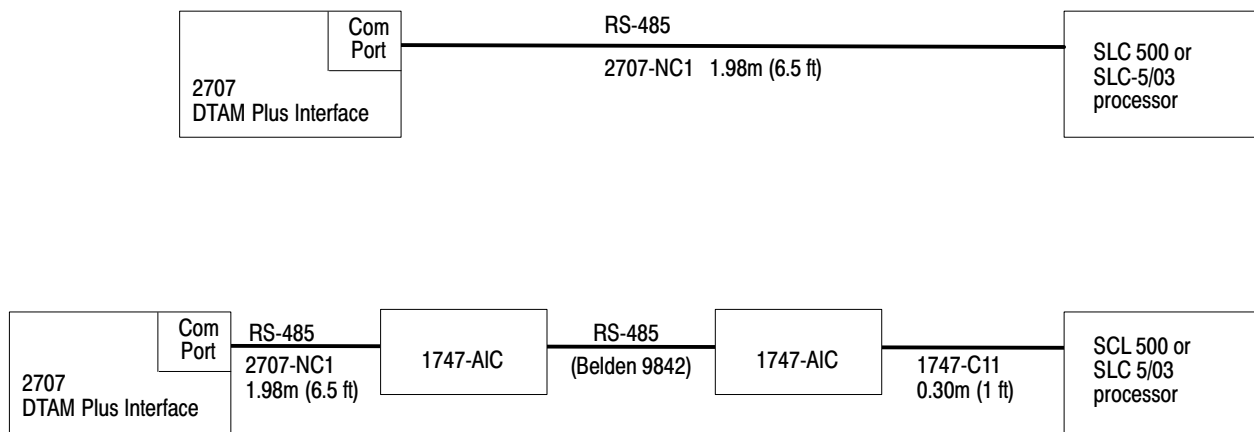
³ To transfer application programs from the DTAM Micro to a personal computer, use the 2707-NC2 cable.

DTAM Plus Operator Interface to SLC or PLC Processor

DTAM Plus ♦ DH485 & Remote I/O & RS-232-C ♦ SLC or PLC Processor

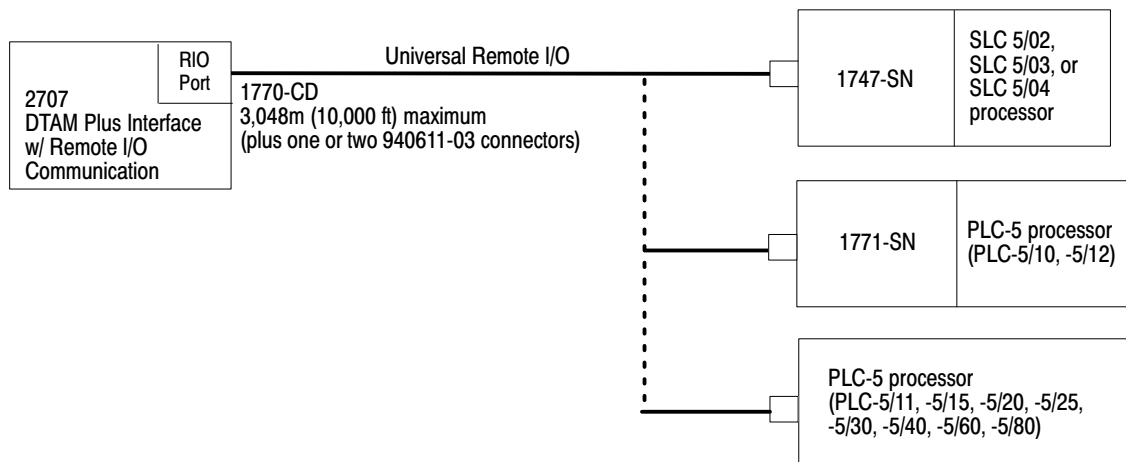
DTAM Plus Operator Interface to SLC Processor

DH-485



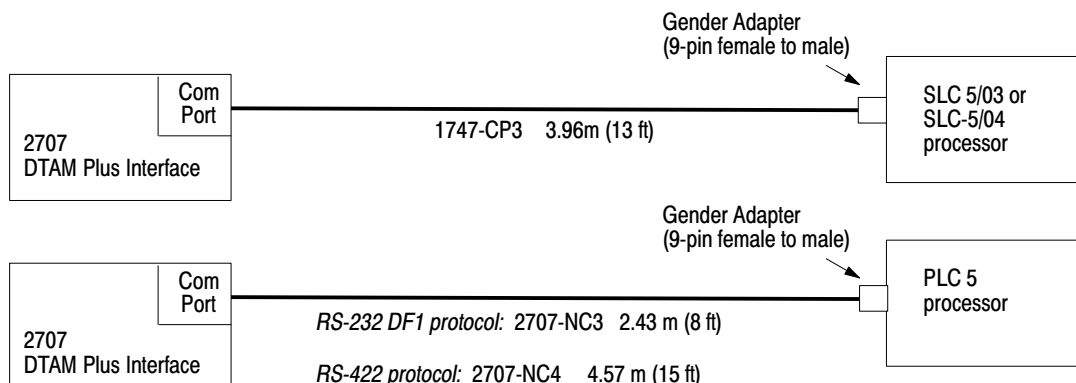
DTAM Plus Operator Interface to SLC and PLC Processors

Universal Remote I/O

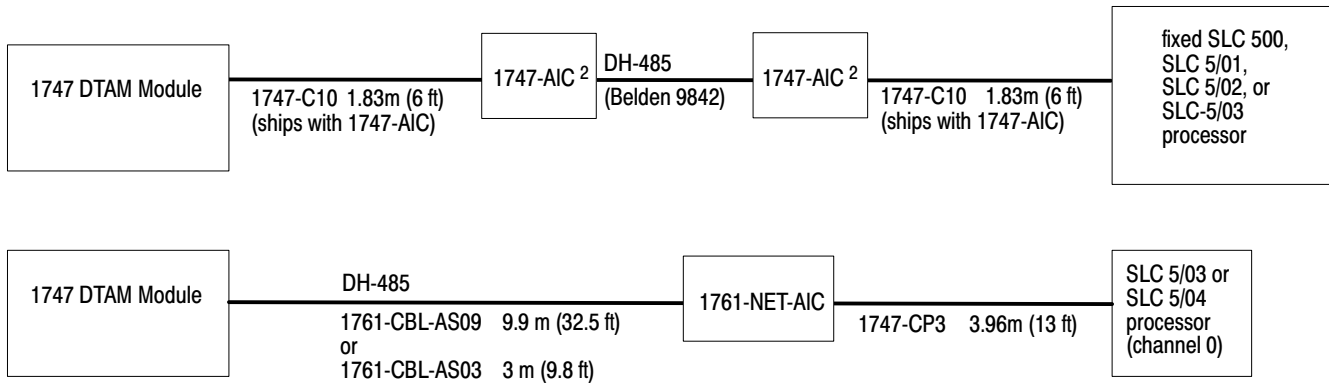


DTAM Plus Operator Interface to SLC and PLC Processors

RS-232-C



DTAM Module to SLC Processors DH-485 Network ¹



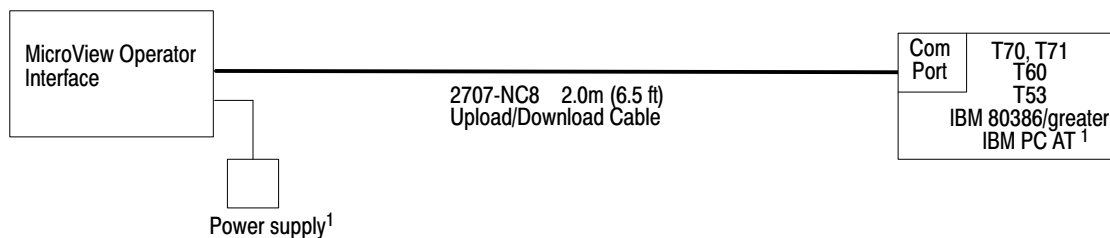
¹ The DH-485 network provides remote communication of up to 1219.2 m (4,000 ft).
You can communicate with up to 31 SLC processors, one at a time, using a 1747-AIC at each node.

² You need to power this AIC with an external +24V dc power supply.

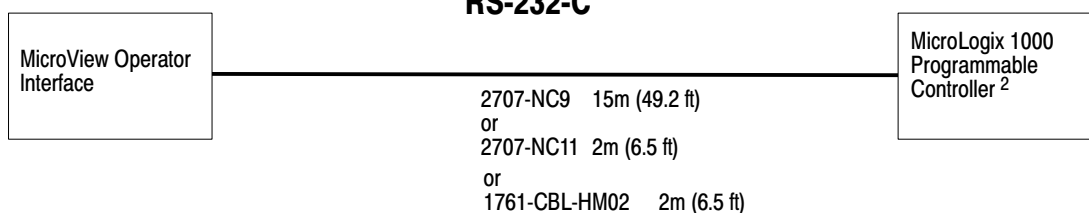
MicroView Operator Interface to PC/OI/MicroLogix PLC

MicroView $\blacktriangleleft$ RS-232-C $\blacktriangleright$ PC/Terminals/OI/MicroLogix 1000 Programmable Controller

MicroView Operator Interface to Personal Computer RS-232-C



MicroView Operator Interface to MicroLogix PLC RS-232-C



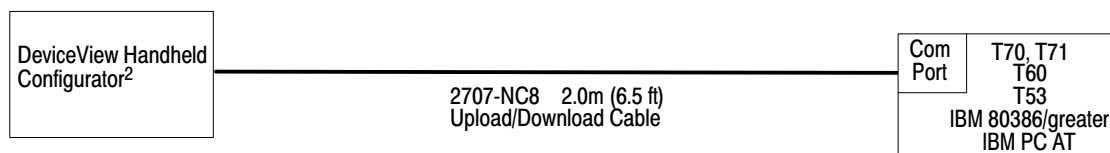
¹ When you use a PC to download a program to the MicroView operator interface, you must use an external power supply (cat. no. 2707-PS120 or 2707-PS220).

² When the MicroView operator interface is plugged directly into the MicroLogix 1000 processor, the MicroView operator interface gets its power directly from the processor.

DeviceView Handheld Configurator to PC/OI

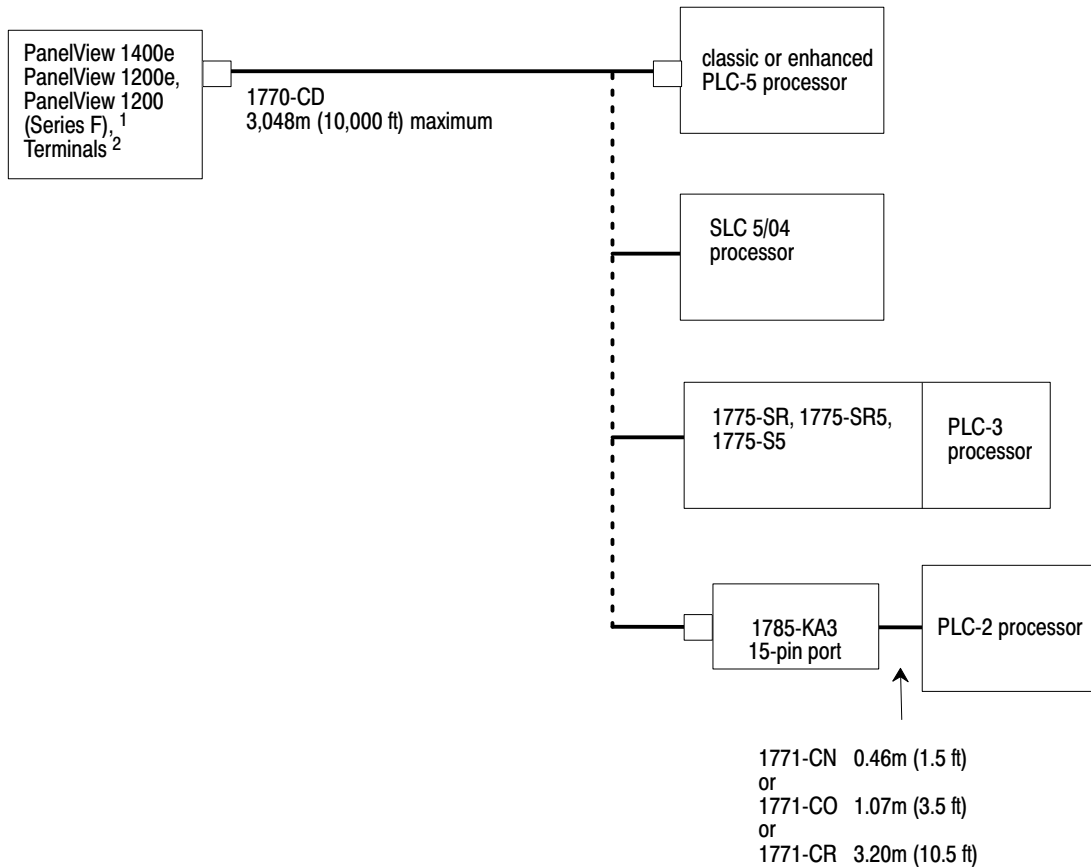
DeviceView $\blacktriangleleft$ RS-232-C $\blacktriangleright$ PC/OI

DeviceView Handheld Configurator to Personal Computer/Terminal RS-232-C



² The DeviceView Configurator requires a power supply (cat. no. 2707-PS220 or 2707-PS120H).

PanelView Terminals to PLC Processors Data Highway Plus



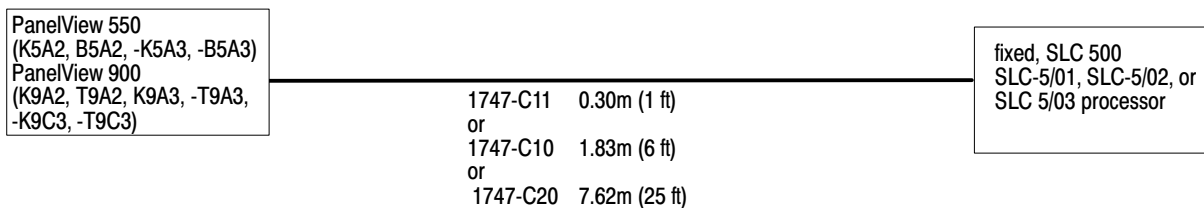
¹ You need an enhancement kit (cat. no. 2711E-U1B12C) in order for the PanelView 1200 (Series F) to communicate over the DH+ network.

² The PanelView Operator Terminals can accept unsolicited messages from the PLC-5, PLC-3, and PLC-2 processors.

PanelView 550 and PanelView 900 Terminals

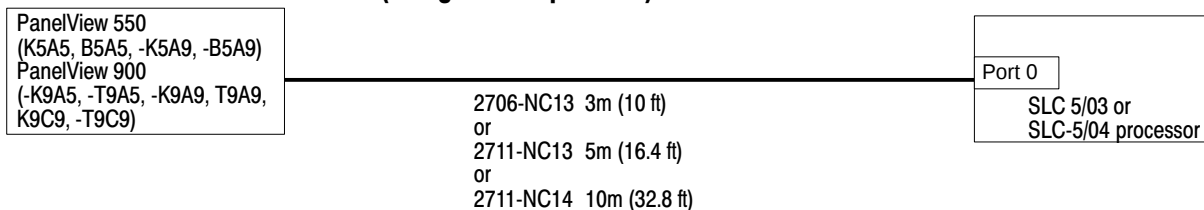
PanelView 550 & PanelView 900 $\blacktriangleleft$ DH485 & RS-232 & Remote I/O $\blacktriangleright$ SLC & PLC-5 Processors

PanelView 550 and PanelView 900 Terminals to SLC Processor DH-485 Point-to-Point

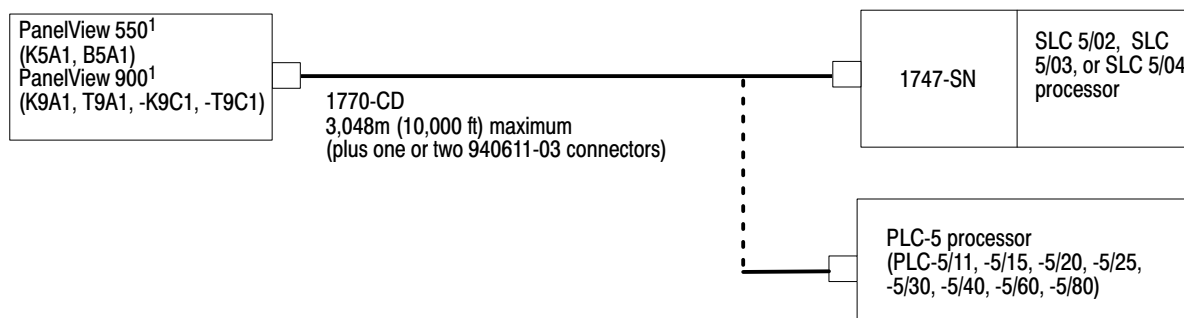


PanelView 550 and PanelView 900 Terminals to SLC Processor RS-232

(using DH-485 protocol)



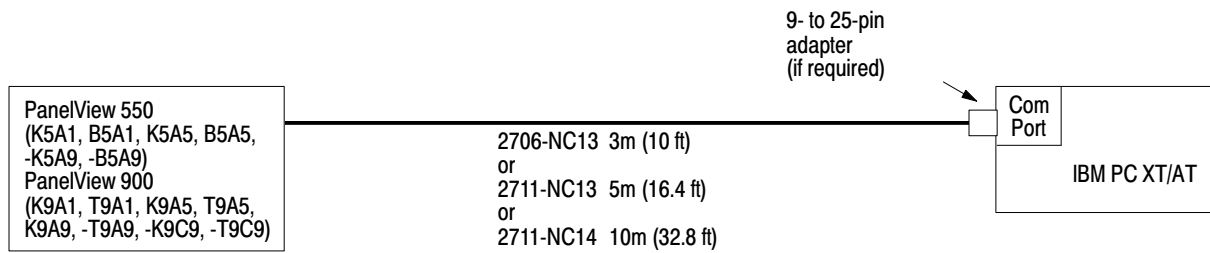
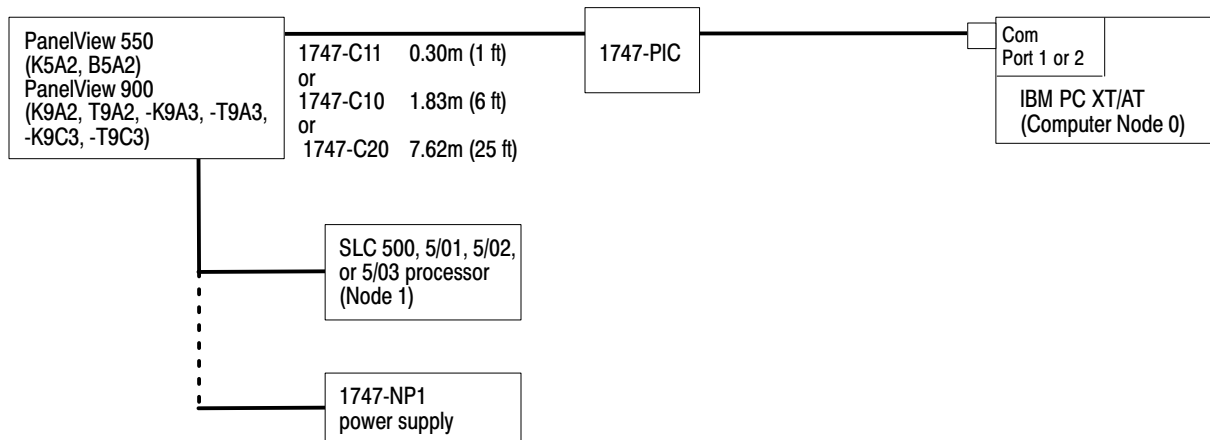
PanelView 550 and PanelView 900 Terminals to SLC or PLC Processor Universal Remote I/O



¹ The PanelView 550 and PanelView 900 Remote I/O terminals ship with a connector plug; however, you can order additional connector plugs (part number 22112-046-03).

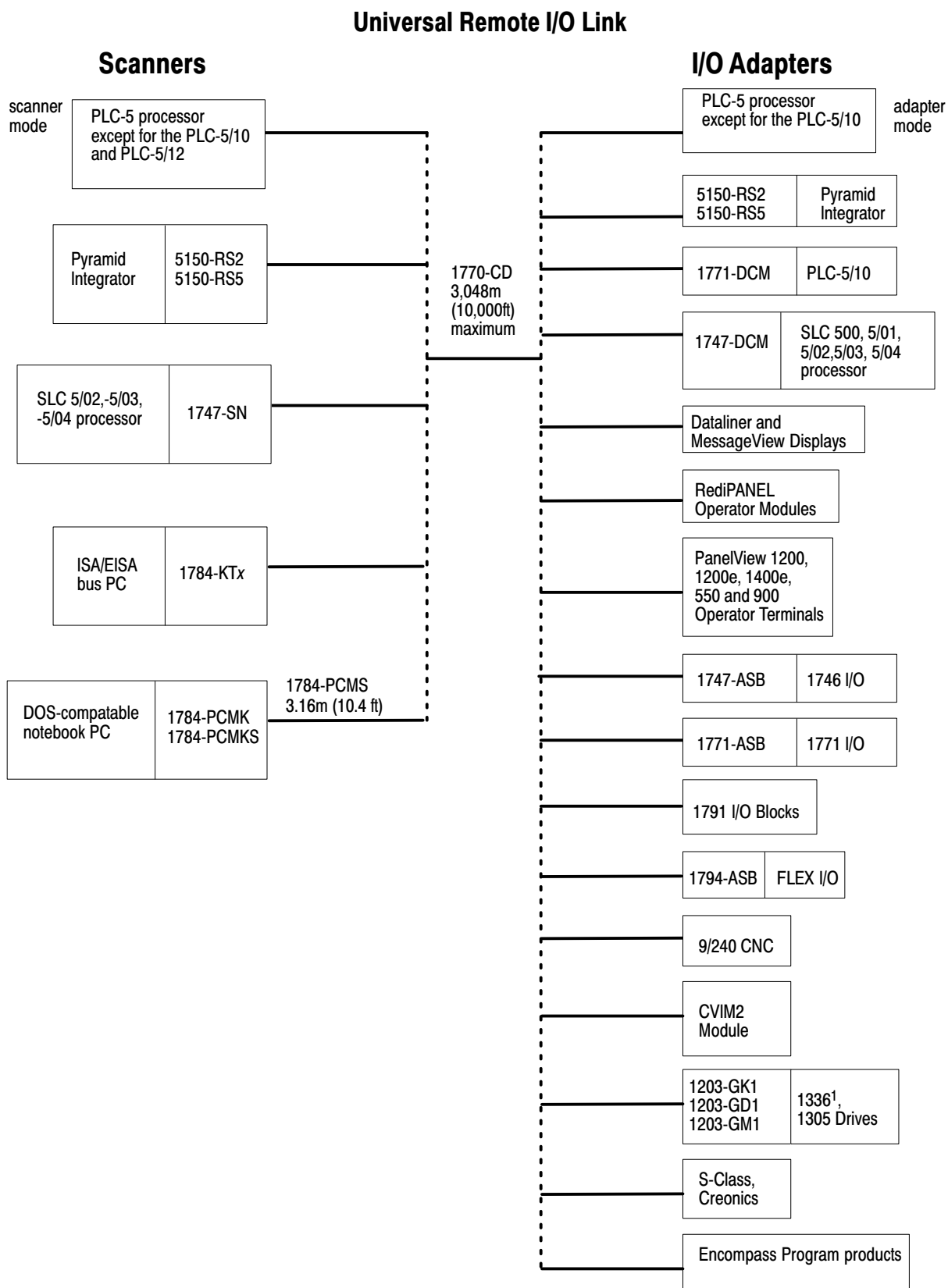
PanelView 550 and PanelView 900 Terminals

PanelView 550 & PanelView 900 ◀ Remote I/O & RS-232 & DH-485 ▶ Personal Computer

**PanelView 550 and PanelView 900 Terminals to Personal Computer
RS-232****PanelView 550 and PanelView 900 Terminals to Personal Computer
DH-485**

Remote I/O Scanners to Remote I/O Adapters

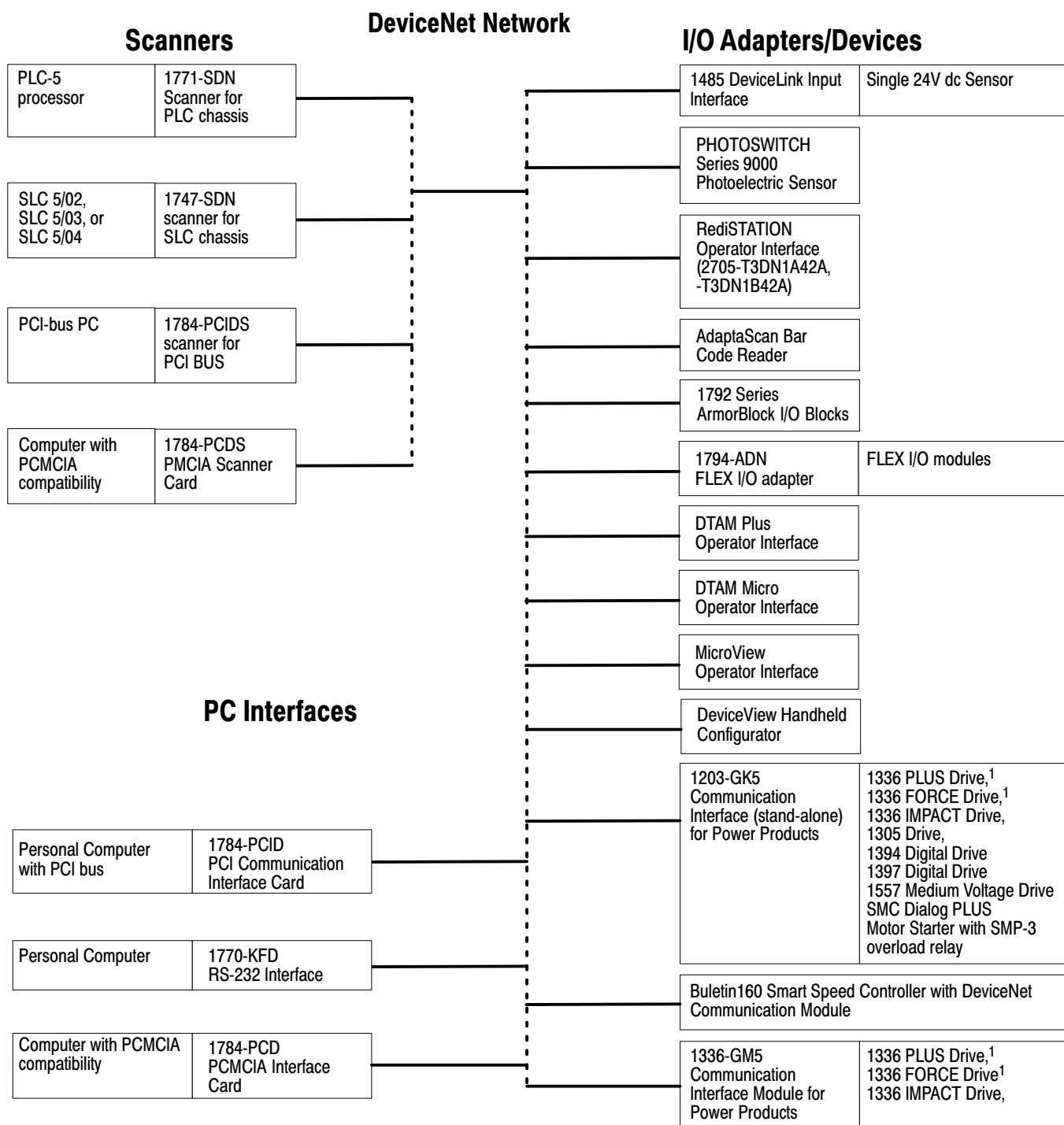
Scanners ◀ Remote I/O ▶ Adapters

¹ 7.5 horsepower or larger drives connect to the network through the 1336-GM5.

Cable Connection Configurations

DeviceNet Scanners to DeviceNet Adapters

Scanners ◀ DeviceNet Network ▶ Adapters

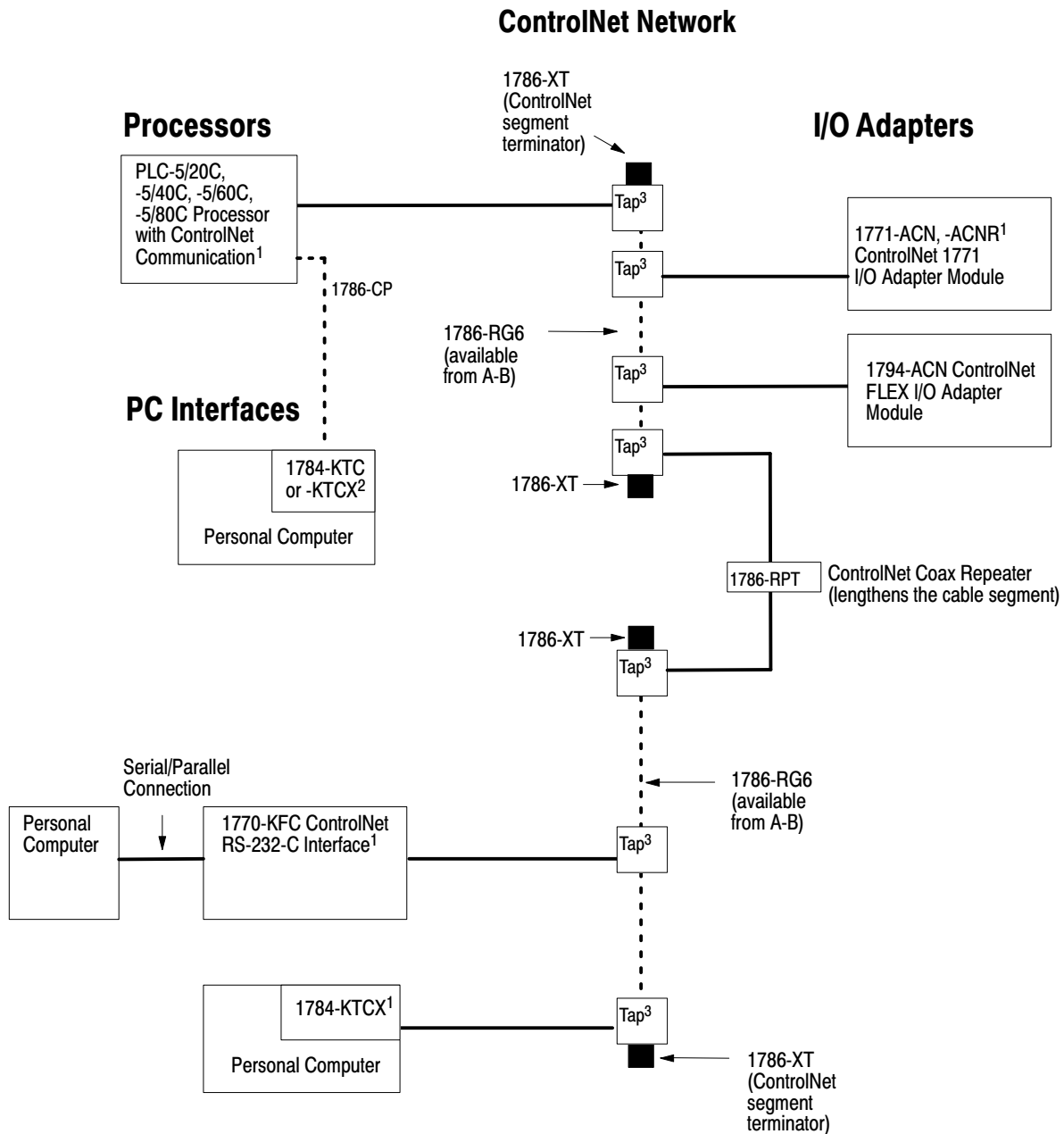


¹ You can connect the 1336 FORCE, 1336 PLUS, and 1336 IMPACT Drives to the DeviceNet network thru either the 1203-GK5 stand-alone communication interface or 1336-GM5 communication interface module. You can place the 1336-GM5 in these drives as long as the drives are 7.5 HP or larger.

For detailed cabling information, see *DeviceNet Product Overview*, publication DN-2.5.

ControlNet Processors to ControlNet Adapters

Processors ♦ ControlNet Network ♦ Adapters



¹ These ControlNet products (1771-ACNR, 1770-KFC, 1784-KTCX, 1785-L20C, and 1785-L40C) support redundant media operation.

² You can place either the 1784-KTC or -KTCX into a personal computer; use a 1786-CP cable to connect to any ControlNet node. The 1784-KTCX also connects directly without the 1786-CP cable.

³ The tap has a 1 meter fixed length cable. Choose from these taps: 1786-TPS (straight T-tap), 1786-TPYS (straight Y-tap), 1786-TPR (right angle T-tap), or 1786-TPYR (right angle Y-tap).