

An individual at a Universal Station can perform any of the following functions:

- Display primary and secondary Process Variables
- Display/Modify/Configure the transmitter database
- Re-range the transmitter
- Save/Restore the database
- Support calibration commands
- Display detailed transmitter status information
- Display the transmitter scratch pad, serial number, and revision level.

Enhanced digital accuracy is provided for all signals, resulting in accuracy that typically is three times better than that of analog.

Serial Device Interface (SDI)

The Serial Device Interface processor provides connection to field devices that use serial communications (EIA-232 or EIA-485). Inputs from these devices are mapped into the I/O database and can be used directly for calculations and control. Since communication is bi-directional, information such as target value or damping factors can be written to or read from the field device. Specific serial devices are supported by custom programmable modules.

One such device is the UDC 6000 Process Controller, which provides single-loop remote display and control capability. Operating as a subsystem of the PM/APM/HPM controller, the UDC 6000 displays PV, SP, and OP on front panel bar graphs. When digitally integrated with the PM/APM/HPM, the UDC Controller can be configured for the following modes:

- Manual/Auto (M/A) Station where all control resides in the PM, APM, or HPM.
- M/A Station with emergency backup control.
- Stand-alone control with the PM/APM/HPM as supervisor.
- Stand-alone control with remote SP from the PM, APM, or HPM.

Another device is the Toledo Weigh Cell (T8142), providing weight, setpoint control of feed (fast cutoff) and rate of change alarming.

Serial Interface (SI) (APM and HPM only)

The **Serial Interface** IOP provides a communications interface to Modbus or Allen-Bradley compatible subsystems (see Figure 3). Each serial interface IOP, by way of a Power Adapter, supports any combination of up to two FTAs. Note that the SI IOP is supported by the APM and HPM *only*. Each FTA supports one port and up to 16 array points.

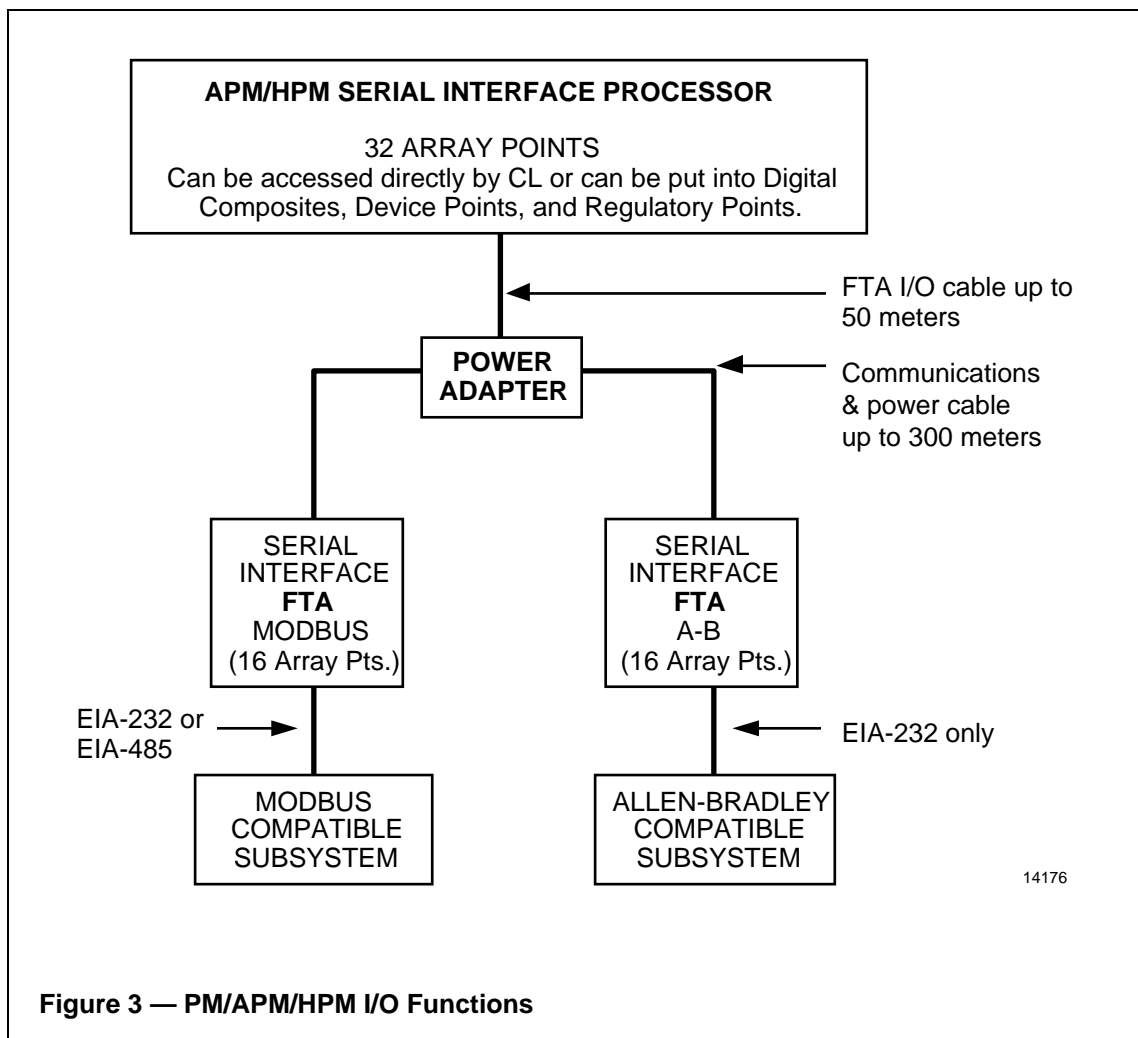


Figure 3 — PM/APM/HPM I/O Functions

Model Numbers

| Description | Uncoated Model Number | Coated Model Number (see note) |
|--|-----------------------|--------------------------------|
| I/O Processors | | |
| High Level Analog Input Processor (16 Inputs) | n/a | MC-PAIH03 |
| Smart Transmitter Interface (Multivariable) Processor (16 Inputs) | MU-PSTX03 | MC-PSTX03 |
| Serial Device Interface Processor (16 Points/Port) | MU-PSDX02 | MC-PSDX02 |
| Serial Interface Processor (16 Points/Port) | MU-PSIM11 | MC-PSIM11 |
| Low Level Analog Input Processor (8 Inputs) | MU-PAIL02 | MC-PAIL02 |
| Low Level Analog Input Multiplexer Processor (32 Inputs) | MU-PLAM02 | MC-PLAM02 |
| Remote Hardened Multiplexer IOP (32-Points) | MU-PRHM01 | MC-PRHM01 |
| Pulse Input Processor (8 Inputs) | MU-PPIX02 | MC-PPIX02 |
| Analog Output Processor (8 Outputs) | n/a | MC-PAOX03 |
| Analog Output 16 Processor (16 Outputs) | n/a | MC-PAOY22 |
| Digital Input Processor (32 Inputs) | MU-PDIX02 | MC-PDIX02 |
| Digital Input Processor for Sequence of Events (32 Inputs) | MU-PDIS12 | MC-PDIS12 |
| Digital Input 24 Vdc Processor (32 Inputs) | MU-PDIY22 | MC-PDIY22 |
| Digital Output Processor (16 Outputs) | MU-PDOX02 | MC-PDOX02 |
| Digital Output 32 Processor (32 Outputs) | MU-PDOY22 | MC-PDOY22 |
| Blank Filler Plate for I/O Slot | MU-PFPX01 | n/a |
| I/O Link Extender Pair–Main Location | MU-IOLM02 | MC-IOLM02 |
| I/O Link Extender Pair–Remote Location | MU-IOLX02 | MC-IOLX02 |
| Long Distance I/O Link Extender Pair | MU-ILDX03 | MC-ILDX03 |
| I/O Link Extender Shroud (EC) | MU-ILES01 | n/a |
| NOTE: MC model numbers indicate conformally coated boards. All IOPs are available conformally coated (MC models). | | |

(Continued)