

3.3 Supported Series C I/O modules

The list of I/O modules below can be used on a Series C IOLINK. The IOLINK contains a function that enables programming and reprogramming the executable image (rather than substitution of a removable hardware component). The preferred method of delivery of the image is over the IOLINK.



Tip

Series C IOLINK cannot contain any PM I/O IOPs.

C300 IOLINK block parameter IOLINKTYPE is used to determine if the IOLINK supports either Series C I/O or PM I/O.

Table 5: Available I/O modules

| IOM model names | IOM block name | Description | # of chnls | Similar to PMIO type | IOP model names |
|------------------------|-----------------------|--|------------|----------------------|-----------------|
| CU-PAIH01 CC-PAIH01 | AI-HART | High Level Analog Input with HART (supports differential inputs on only channel 13 through channel 16) Refer to Attention | 16 | HLAIHART | |
| CC-PAIH02 | AI-HART | High Level Analog Input with HART ((supports differential inputs on all 16 channel) | 16 | HLAIHART | |
| CC-PAIX02 | AI-HART | High Level Analog Input with Differential/Single-ended non-HART (supports differential inputs on all 16 channels) | 16 | HLAI | |
| CC-PAIX01 | AI-HL | High Level Analog Input with Differential non-HART (supports differential inputs on only channel 13 through channel 16) Refer to Attention | 16 | HLAI | |
| CU-PAIN01 CC-PAIN01 | AI-HL | High Level Analog Input with non-HART | 16 | HLAI | |
| CC-PAIH51 | AI-HART | 1 Modem, High Level Analog Input with HART | 16 | HLAIHART | |
| CU-PAON01 CC-PAON01 | AO | Analog Output with non-HART | 16 | AO16 | |
| CU-PAOX01 CC-PAOX01 | AO | Analog Output with non-HART Refer to Attention | 16 | AO16 | |
| CU-PAIM01 CC-PAIM01 | AI-LLMUX ¹ | Low Level Analog Input Mux | 64 | LLMUX | |
| CC-PAIM51 | AI-LLAI | Low Level Analog Input Mux | 16 | LLAI | |

| IOM model names | IOM block name | Description | # of chnls | Similar to PMIO type | IOP model names |
|------------------------|---------------------|---|------------|----------------------|-----------------|
| CU-PAOH01 CC-PAOH01 | AO-HART | Analog Output with HART | 16 | AO16HART | |
| CC-PAOH51 | AO-HART | 1 Modem, Analog Output with HART | 16 | AO16HART | |
| CU-PDIH01 CC-PDIH01 | DI-HV | High Voltage Digital Input (IOM supports both 120 and 240 volts AC) | 32 | DI | |
| CU-PDIL01 CC-PDIL01 | DI-24 | Low Voltage Digital Input (24 volts DC) | 32 | DI or DI24V | |
| CC-PDIL51 | DI-24 | Low Voltage, Digital Input (24 volts DC) | 32 | DI | |
| CU-PDIS01 CC-PDIS01 | DI-SOE | Low Voltage Digital Input (24 volts DC) | 32 | DISOE | Mx-PDIS12 |
| CU-PDOB01 CC-PDOB01 | DO-24B ² | Bussed Low Voltage Digital Output (24 volts DC) | 32 | DO_32 | |
| CC-PDOD51 | DO-24B | Bussed Low Voltage, Digital Output (24 volts DC) | 32 | DO32 | |
| CU-PSOE01 CC-PSOE01 | DI-SOE | Low Voltage Digital Input SOE (24 volts DC) | 32 | DISOE | |
| CC-PSP401 | SP | Speed Protection | 26 | | |
| CC-PSV201 | SVP | Servo Valve Positioner | 8 | | |
| CC-PPIX01 | PIM | Pulse Input Module | 8 | PI IOP | |
| CC-PUIO01 | UIO | Universal Input/Output Module | 32 | | |

Following Series C IO modules introduced in Experion PKS R410.

| | |
|-----------------------|------------|
| HART Analog Input | CC -PAIH51 |
| HART Analog Output | CC-PAOH51 |
| Digital Input 24V DC | CC-PDIL51 |
| Digital Output 24V DC | CC-PDOD51 |

These modules must be used only with Experion PKS R410 and later. These modules will not work as expected with earlier releases of Experion PKS. Using these with Experion releases prior to R410 by downgrading the firmware may render the module faulty and may not be possible to recover.

NOTES:

- There are two models of High Level Analog Input such as, CU-PAIX01 and CU-PAIN01. The Module Hardware and the corresponding IOTAs are different and CU-PAIN01 is a new model. From the perspective of configuration and implementation, both High Level Analog Input models use the same IOM Block such as, AI-HL. It must be noted that the two models utilize the same configuration; online migration is not possible as mixed redundant pair is not possible. There are two models of Analog Output such as, CU-PAOX01 and CU-PAON01. Hence, similarly configuration, implementation, and interoperability constraints apply and CU-PAON01 is the new model.
- Two new models of AI-HART (CC-PAIH02) and AI-HL (CC-PAIX02) modules are introduced to replace the older models of the AI-HART (CC-PAIH01) and AI-HL (CC-PAIX01) modules. The new models support both single-ended and differential inputs.