

Technical Information

ExperionPKS C300 Controller Capacity



EP03-300-511

[Keywords]

July 2019, Version 1

2.3 C300 Capacity and Performance

2.3.1 C300 Configuration Options

C300 Configuration Options		
	50 ms CEE	20 ms CEE ⁴
Control Networks Supported	FTE only ¹	FTE only ¹
Supported C300 Models ^{6,7}	CC-PCNT01 CC-PCNT02	CC-PCNT01 CC-PCNT02
Device Index Configuration	Between 1 and 510	Between 1 and 510
IOTA Size	6 inches	6 inches
Number of I/O Links Supported	2	2
I/O Link Speeds Available	375 Kbaud (PMIO Link) 750 Kbaud (Series C IO Link)	750 Kbaud (Series C IO Link) 375 Kbaud (PMIO Link) is not supported
Base Execution Periods Supported	50 ms	20 ms (optional) ⁴
Redundancy Supported	Yes	Yes
Remote – Non-Series C I/O Supported	Yes – PM I/O or Series A I/O ³	No – Only Series C I/O supported with limited capacities.
I/O Module Execution Period	50 ms	20 ms
Configurable Values for CM/SCM/RCM Execution Periods ⁵	50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000, 300000, 60000 ms.	20, 40, 80, 200, 400, 800 ms. <i>CMs Only – SCM/RCM/MR not supported</i>
Configurable Values of Peer Update Rates (period). <i>Defines the period at which data is updated for all 'pull/get' requests for peer data required by all blocks within a CEE.</i>	100, 200, 500, 1000 ms.	100, 200, 500, 1000 ms.
C300 Time Source	SNTP, PTPv2	SNTP, PTPv2
SNTP Update Period	1 minute	1 minute
GPS Time Support ²	No	No
PTP Update Period	30 seconds	30 seconds
<p>Note 1 – Currently, every C300 must be connected to a Control Firewall</p> <p>Note 2 – A GPS connector is available on the IOTA, but it is not supported until a future release.</p> <p>Note 3 –C300 20ms supports only Series C I/O.</p> <p>Note 4 – Requires separately loaded Firmware Version and License. C300 20 ms CEE may ONLY be used for Honeywell Turbine Control Solution (TMCS) in R410.1.</p>		

Note 5- Slower execution periods are supported for Profit Controller Block only

Note 6- C300 controller CC-PCNT02 replaces CC-PCNT01 for new installations and field replacements.

Note 7- C300 controller must use CC-PCNT02 model with extended functionality firmware image for C300 extended functionalities (EIM, Profit Controller)