

Appendix C

Series One Family of Programmable Controllers Compatibility Guide

Feature	Junior	One™	Model E	Plus	Plus 3.7K
I/O Points (maximum)	24 Basic Unit 50 W/Exp Unit 96 W/Exp Rack	112	112	168	168
Memory					
Memory, 700 words CMOS RAM	standard	standard	standard	standard	n/a
Memory, Expand to 1724 words	no	yes (1)	yes (1)	yes (1)	n/a
Memory, 3700 words CMOS	no	no	no	no	yes
RAM					
EPR0M, non-volatile storage	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)
Battery Back-Up	yes	yes	yes	yes	yes
Typical Scan 0.5 K Program:	20 mSec	20 mSec	8 mSec	8 mSec	8 mSec
Times 1.0 K Program:	40 mSec	40 mSec	12 mSec	12 mSec	12 mSec
1.7 K Program:	n/a	65 mSec	15 mSec	15 mSec	15 mSec
3.7 K Program:	n/a	n/a	n/a	n/a	36 mSec
Internal Functions	160	144	144	144	144
Non-Retentive Coils	96	112	112	112	112
Retentive Coils	59	28	28	28	28
Special Function Coils	5	4	4	4	4
Timers/Counters	20 (4-digit)	64 (4-digit)	64 (4-digit)	64 (4-digit)	64 (4-digit)
Thumbwheel Interface Module	no	yes	yes (3)	yes (3)	yes (3)
Timer/Counter Setpoint Unit	yes	no	yes (3)	yes (3)	yes (3)
Shift Registers	155 steps	128 steps	128 steps	128 steps	128 steps
Data Registers (12)	no	no	no	64 (16-bit)	64 (16-bit)
Sequencers	20 (1000 step)	64 (1000 step)	64 (1000 step)	64 (1000 step)	64 (1000 step)
High Speed Counter					
Built-In (2 KHz)	yes	no	no	no	no
I/O Module (10 KHz)	no	yes	yes	yes	yes
Discrete I/O Modules	yes (4, 5, 6)	yes	yes	yes	yes
Analog I/O Modules	yes (4, 7)	yes (7)	yes (7)	yes	yes
UL Listed Modules	yes	yes	yes	yes	yes
Remote I/O	yes (9)	yes (8)	yes (8)	yes (8)	yes (8)
No. of I/O in Remote System	26, 40 or 72	96	96	96	96
Programming Language					
Basic Ladder Diag. Functions	yes	yes	yes	yes	yes
Data Operations and Math	no	no	no	yes	yes
Program W/Hand-Held Programmer					
IC610PRG100	yes	yes	yes	yes (11)	yes (11)
IC610PRG105	yes	yes	yes	yes	yes
Hand-Held Prog Mount Assembly	yes	yes	yes	yes	yes

1. CMOS RAM memory
Series One, 6116LP, Series One Plus, 6264LP-15 (low power devices only)
2. EPROM memory
Series One Junior & Series One, 2732
Series One Plus, 27256-25
Series One Plus 3.7K, 27256-25
3. One Thumbwheel Interface or one Timer/Counter Setpoint Unit can be used in a system, not both
4. Requires Series One 5 or 10-slot expansion rack.
5. Limited to one 16-point module per system.
6. See I/O Module Compatibility Chart
7. Has limited usefulness
8. Remote I/O stations can be located up to 3300' (1Km) from the CPU, connected by twisted-pair cable to I/O Link Local and I/O Link Remote modules.
9. Expansion rack can be 100' (30m) from basic unit, connected through an I/O Expansion cable to a basic unit and an I/O Expansion module in the Expansion rack.
10. Applies to Series One Junior only.
11. PRG 100 cannot access data registers, data operations, or math.
12. Up to 124 total if unused Timer/Counter references used as data registers.

Feature	Junior	One™	Model E	Plus	Plus 3.7K
Program with Workmaster® Computer or IBM Personal Computer	(1)	yes	yes	yes	yes
Program with LCD Port. Programmer CPU	yes	yes	yes	yes	yes
IC610CPU101 (UL Listed)	n/a	yes	no	no	no
IC610CPU104	n/a	no	yes	no	no
IC610CPU105	n/a	no	no	yes	no
IC610CPU106	n/a	no	no	no	yes
Password Protection Available	no	no	yes	yes	yes
Racks					
5-slot, IC610CHS101 (2)(6)	no	yes	yes	yes	yes
5-slot, IC610CHS110 (2)	yes(expansion)	yes	yes	yes	yes
5-slot, IC610CHS111 (5)	yes(expansion)	yes	yes	yes	yes
5-slot, IC610CHS114 (3)	yes(expansion)	yes	yes	yes	yes
10-slot, IC610CHS130 (2)	yes(expansion)	yes	yes	yes	yes
10-slot, IC610CHS134 (3)	yes(expansion)	yes	yes	yes	yes
19" Rack Mounting Brackets	yes (4)	yes (4)	yes (4)	yes (4)	yes (4)
Data Communications Unit, CCM100	yes	yes	no	no	no
Data Communications Unit, CCM105	yes	yes	yes	yes	yes Rev C
RS-232/422 Adaptor Unit	yes	yes	yes	yes	yes
Peripheral Devices					
Printer Interface Unit Rev C	yes Rev A & B	yes Rev A & B	yes Rev B	yes Rev B	yes
PROM Writer Unit	yes Rev A & B	yes Rev A & B	yes Rev B	yes Rev B	yes Rev C
Timer/Counter Setpoint Unit	yes	no	yes	yes	yes
Cassette Tape Recorder	yes	yes	yes	yes	yes
Accessory Kit	included	yes	yes	yes	yes

1. Future enhancement with this product.
2. Requires 115/230 V ac power source.
3. Requires 24 V dc power source.
4. Used with 10-slot rack.
5. UL Listed, 115 V ac power source only.
6. Not expandable

GENERAL SPECIFICATIONS

Humidity	5% to 95% (non-condensing)
Typical Battery Life	
Operating	2 to 5 Years
Shelf Life	8 to 10 Years
Operating Power For Series One Junior Basic Units and all Racks	115/230 V ac 24 V dc See specifications for each unit or rack for details