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MODEL PAX - 1/8 DIN DIGITAL INPUT PANEL METERS

- COUNT, DUAL COUNTER, RATE AND SLAVE DISPLAY
- 0.56" RED SUNLIGHT READABLE DISPLAY
- VARIABLE INTENSITY DISPLAY
- 10 POINT SCALING FOR NON-LINEAR PROCESSES (PAXI)
- FOUR SETPOINT ALARM OUTPUTS (W/Option Card)
- RETRANSMITTED ANALOG OUTPUT (W/Option Card) (PAXI)
- COMMUNICATION AND BUS CAPABILITIES (W/Option Card) (PAXI)
- BUS CAPABILITIES; DEVICENET, MODBUS, AND PROFIBUS-DP
- CRIMSON® PROGRAMMING SOFTWARE (PAXI)
- ETHERNET(W/ External Gateway) (PAXI)
- NEMA 4X/IP65 SEALED FRONT BEZEL

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GENERAL DESCRIPTION

The PAX Digital Input Panel Meters offer many features and performance capabilities to suit a wide range of industrial applications. Available in three different models, PAXC Counter/Dual Counter, PAXR Rate Meter and the PAXI which offers both counting and rate in the same package. Refer to pages 4 - 5 for the details on the specific models. The PAXC and PAXR offer only the Setpoint Option, while the PAXI is the fully featured version offering all the capabilities as outlined in this bulletin as well as a slave display feature. The optional plug-in output cards allow the opportunity to configure the meter for present applications, while providing easy upgrades for future needs.

The meters employ a bright 0.56" LED display. The meters are available with a red sunlight readable or standard green LED display. The intensity of the display can be adjusted from dark room applications up to sunlight readable, making it ideal for viewing in bright light applications.

The meters accept digital inputs from a variety of sources including switch contacts, outputs from CMOS or TTL circuits, magnetic pickups and all standard RLC sensors. The meter can accept directional, uni-directional or Quadrature signals simultaneously. The maximum input signal varies up to 34 KHz depending on the count mode and function configurations programmed. Each input signal can be independently scaled to various process values.

The Rate Meters provide a MAX and MIN reading memory with programmable capture time. The capture time is used to prevent detection of false max or min readings which may occur during start-up or unusual process events.

Optional digital output plug-in cards provide the meter with up to four setpoint outputs. The cards are available as dual relay, quad relay, quad sinking transistor, quad sourcing transistor/SSR drive, or dual triac dual SSR drive outputs. The setpoint alarms can be configured to suit a variety of control and alarm requirements.

Communication and Bus Capabilities are also available as option cards for the PAXI only. These include RS232, RS485, Modbus, DeviceNet, and Profibus-DP. Readout values and setpoint alarm values can be controlled through the bus. Additionally, the meters have a feature that allows a remote computer to directly control the outputs of the meter. With an RS232 or RS485 card installed, it is possible to configure the meter using Red Lion's Crimson software. The configuration data can be saved to a file for later recall.

A linear DC output signal is available as an optional Plug-in card for the PAXI only. The card provides either 20 mA or 10 V signals. The output can be scaled independent of the input range and can track any of the counter or rate displays.

Once the meters have been initially configured, the parameter list may be locked out from further modification in its entirety or only the setpoint values can be made accessible.

The meters have been specifically designed for harsh industrial environments. With NEMA 4X/IP65 sealed bezel and extensive testing of noise effects to CE requirements, the meter provides a tough yet reliable application solution.

SAFETY SUMMARY

All safety related regulations, local codes and instructions that appear in this literature or on equipment must be observed to ensure personal safety and to prevent damage to either the instrument or equipment connected to it. If equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

Do not use this meter to directly command motors, valves, or other actuators not equipped with safeguards. To do so can be potentially harmful to persons or equipment in the event of a fault to the meter.
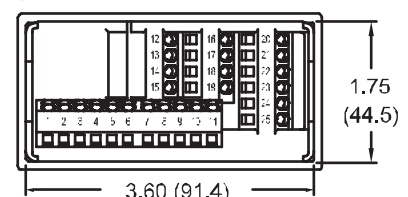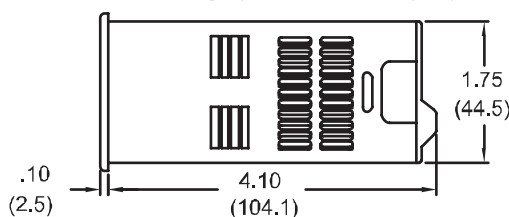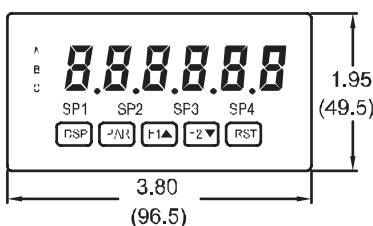
⚠ CAUTION: Risk of Danger.
Read complete instructions prior to installation and operation of the unit.

⚠ CAUTION: Risk of electric shock.

DIMENSIONS In inches (mm)

Note: Recommended minimum clearance (behind the panel) for mounting clip installation is 2.1" (53.4) H x 5" (127) W.

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ORDERING INFORMATION

Meter Part Numbers

| PAX | | 0 | | | 0 |

C - Counter/Dual Counter
R - Rate Meter
I - Counter/Dual Counter/
    Rate Meter/Slave Display

0 - Red, Sunlight Readable Display
1 - Green Display

2 - 85 to 250 VAC
3 - 11 to 36 VDC, 24 VAC

Option Card and Accessories Part Numbers

TYPE	MODEL NO.	DESCRIPTION	PART NUMBER
Optional Plug-In Cards	PAXCDS	Dual Setpoint Relay Output Card	PAXCDS10
		Quad Setpoint Relay Output Card	PAXCDS20
		Quad Setpoint Sinking Open Collector Output Card	PAXCDS30
		Quad Setpoint Sourcing Open Collector Output Card	PAXCDS40
		Dual Triac/Dual SSR Drive Output Card	PAXCDS50
		Quad Form C Relay Output Card	PAXCDS60 *
	PAXCDC[1]	RS485 Serial Communications Card with Terminal Block	PAXCDC10
		Extended RS485 Serial Communications Card with Dual RJ11 Connector	PAXCDC1C
		RS232 Serial Communications Card with Terminal Block	PAXCDC20
		Extended RS232 Serial Communications Card with 9 Pin D Connector	PAXCDC2C
		DeviceNet Communications Card	PAXCDC30
		Profibus-DP Communications Card	PAXCDC50
	PAXUSB	PAX USB Programming Card (Not included in PAX product UL E179259 file).	PAXUSB00
	PAXCDL	Analog Output Card	PAXCDL10
Accessories	SFCRD[2]	Crimson PC Configuration Software for Windows 2000, XP and Windows 7	SFCRD200
	ICM8	Communication Gateway	ICM80000

* This card is not suitable for use in older PAX models. For proper installation, a case knock-out feature must be present on the top surface of the PAX case. This feature began to be introduced to the standard PAX units in July of 2014 (2614).

Notes:
[1] For Modbus communications use RS485 Communications Card and configure Communication Type parameter (ᵗᵧᵖᵉ) for Modbus.
[2] Crimson software is available for free download from http://www.redlion.net
[3] Shaded areas are only available for the PAXI

GENERAL METER SPECIFICATIONS

1. **DISPLAY:** 6 digit, 0.56" (14.2 mm) red sunlight readable or standard green LED
2. **POWER:**
   AC Versions:
   AC Power: 85 to 250 VAC, 50/60 Hz, 18 VA
   Isolation: 2300 Vrms for 1 min. to all inputs and outputs. (300 V working)
   DC Versions:
   DC Power: 11 to 36 VDC, 14 W
   (derate operating temperature to 40° C if operating <15 VDC and three plug-in option cards are installed)
   AC Power: 24 VAC, ±10%, 50/60 Hz, 15 VA
   Isolation: 500 Vrms for 1 min. to all inputs and outputs (50 V working).
3. **SENSOR POWER:** 12 VDC, ±10%, 100 mA max. Short circuit protected
4. **KEYPAD:** 3 programmable function keys, 5 keys total
5. **USER INPUTS:** Three programmable user inputs
   Max. Continuous Input: 30 VDC
   Isolation To Sensor Input Commons: Not isolated
   Logic State: Jumper selectable for sink/source logic

INPUT STATE	SINKING INPUTS 5.1 KΩ pull-up to +12 V	SOURCING INPUTS 5.1 KΩ pull-down
Active	V_{IN} < 0.9 VDC	V_{IN} > 2.4 VDC
Inactive	V_{IN} > 2.4 VDC	V_{IN} < 0.9 VDC

Response Time: 6 msec. typical; function dependent. Certain resets, stores and inhibits respond within 25 μsec if an edge occurs with the associated counter or within 6 msec if no count edge occurs with the associated counter. These functions include `Ctr5tt`, `Ctr5tE`, `Htr5tt`, `Htr5tE`, `InHIbt`, `5tOrE`, and `PrArSt`. Once activated, all functions are latched for 50 msec min. to 100 msec max. After that period, another edge level may be recognized.
6. **OUTPUT:**
   Response Time: 25 μsec.; add 6 msec (typical) if a relay card is installed
   Timed Output Accuracy: Counter − ± 0.01% + 10 msec.
   Rate − = 0.01% − 20 msec.
7. **MEMORY:** Nonvolatile memory retains all programmable parameters and display values when power is removed.

8. **CERTIFICATIONS AND COMPLIANCES:**
   CE Approved
   EN 61326-1 Immunity to Industrial Locations
   Emission CISPR 11 Class A
   Safety requirements for electrical equipment for measurement, control, and laboratory use:
   EN 61010-1: General Requirements
   EN 61010-2-030: Particular Requirements for Testing and Measuring Circuits
   RoHS Compliant
   UL Recognized Component: File #E179259
   UL Listed: File #E137808
   Type 4X Enclosure rating (Face only)
   IP65 Enclosure rating (Face only)
   IP20 Enclosure rating (Rear of unit)
   Refer to EMC Installation Guidelines section of the bulletin for additional information.
9. **ENVIRONMENTAL CONDITIONS:**
   Operating Temperature Range: 0 to 50°C (0 to 45°C with all three plug-in cards installed)
   Storage Temperature Range: -40 to 60°C
   Operating and Storage Humidity: 0 to 85% max. relative humidity non-condensing
   Vibration to IEC 68-2-6: Operational 5 to 150 Hz, 2 g.
   Shock to IEC 68-2-27: Operational 25 g (10 g relay).
   Altitude: Up to 2000 meters
10. **CONNECTIONS:** High compression cage-clamp terminal block
    Wire Strip Length: 0.3" (7.5 mm)
    Wire Gage: 30-14 AWG copper wire
    Torque: 4.5 inch-lbs (0.51 N-m) max.
11. **CONSTRUCTION:** This unit is rated for NEMA 4X IP65 outdoor use. IP20 Touch safe. Installation Category II, Pollution Degree 2. One piece bezel/case. Flame resistant. Synthetic rubber keypad. Panel gasket and mounting clip included.
12. **WEIGHT:** 10.1 oz. (286 g)

MODEL PAXC - 1/8 DIN COUNTER

- 6-DIGIT LED DISPLAY (Alternating 8 digits for counting)
- DUAL COUNT QUAD INPUTS
- UP TO 3 COUNT DISPLAYS
- SETPOINT ALARM OUTPUTS (W/Plug-in card)

PAXC SPECIFICATIONS

MAXIMUM SIGNAL FREQUENCIES:

To determine the maximum frequency for the input(s), first answer the questions with a yes (Y) or no (N). Next determine the Count Mode to be used for the counter(s). If dual counters are used with different Count Modes, then the lowest frequency applies to both counters.

FUNCTION QUESTIONS	Single: Counter A or B				Dual: Counter A & B			
Are any setpoints used?	N	N	Y	Y	N	N	Y	Y
Is Counter C used?	N	Y	N	Y	N	Y	N	Y
COUNT MODE	(Values are in KHz)				(Values are in KHz)			
Count x1	34	25	18	15	13	12	9	7.5
Count x2	17	13	9	7	9	7	5	4
Quadrature x1	22	19	12	10	7	6	4	3.5
Quadrature x2	17	13	9	7	7	6	4	3.5
Quadrature x4	8	6	4	3				

Notes:

1. Counter Modes are explained in the Module 1 programming section.
2. Listed values are with frequency DIP switch set on HI frequency.

ANNUNCIATORS:
- A - Counter A
- B - Counter B
- C - Counter C
- *DF* - Upper significant digit display of counter
- SP1 - setpoint 1 output state
- SP2 - setpoint 2 output state
- SP3 - setpoint 3 output state
- SP4 - setpoint 4 output state

COUNTER DISPLAYS:

Maximum display: 8 digits: ± 99999999 (greater than 6 digits, display alternates between high order and low order.)

INPUTS A and B:

DIP switch selectable to accept pulses from a variety of sources including switch contacts, TTL outputs, magnetic pickups and all standard RLC sensors.

LOGIC: Input trigger levels V_{IL} – 1.5 V max.; V_{IH} – 3.75 V min.

Current sinking: Internal 7.8 KΩ pull-up to +12 VDC, I_{MAX} – 1.9 mA.

Current sourcing: Internal 3.9 KΩ pull-down, 7.3 mA max. @ 28 VDC, V_{MAX} – 30 VDC.

Filter: Damping capacitor provided for switch contact bounce. Limits input frequency to 50 Hz and input pulse widths to 10 msec. minimum.

DUAL COUNT MODES:

When any dual count mode is used, then User Inputs 1 and/or 2 will accept the second signal of each signal pair. The user inputs do not have the Logic/Mag, HI/LO Freq, and Sink/Source input setup switches. The user inputs are inherently a logic input with no low frequency filtering. Any mechanical contacts used for these inputs in a dual count mode must be debounced externally. The user input may only be selected for sink/source by the User Jumper placement.

MODEL PAXR - 1/8 DIN RATE METER

- 5-DIGIT LED DISPLAY
- RATE INDICATION
- MINIMUM/MAXIMUM RATE DISPLAYS
- SETPOINT ALARM OUTPUTS (W/Plug-in card)

PAXR SPECIFICATIONS

ANNUNCIATORS:
- *r* - Rate
- *H* - Maximum (High) Rate
- *L* - Minimum (Low) Rate
- SP1 - setpoint 1 output state
- SP2 - setpoint 2 output state
- SP3 - setpoint 3 output state
- SP4 - setpoint 4 output state

RATE DISPLAY:
Accuracy: ±0.01%
Minimum Frequency: 0.01 Hz
Maximum Frequency: 34 KHz
Maximum Display: 5 Digits: 99999
Adjustable Display (low) Update: 0.1 to 99.9 seconds
Over Range Display: "*r OLOL*"

INPUT A:

DIP switch selectable to accept pulses from a variety of sources including TTL outputs, magnetic pickups and all standard RLC sensors.

LOGIC: Input trigger levels V_{IL} – 1.5 V max.; V_{IH} – 3.75 V min.

Current sinking: Internal 7.8 KΩ pull-up to +12 VDC, I_{MAX} = 1.9 mA.

Current sourcing: Internal 3.9 KΩ pull-down, 7.3 mA max. @ 28 VDC, V_{MAX} = 30 VDC.

MAGNETIC PICKUP:
Sensitivity: 200 mV peak
Hysteresis: 100 mV
Input impedance: 3.9 KΩ @ 60 Hz
Maximum input voltage: ±40 V peak, 30 Vrms

MODEL PAXI - 1/8 DIN COUNTER/RATE METER

- COUNT, RATE AND SLAVE DISPLAY
- 6-DIGIT 0.56" RED SUNLIGHT READABLE DISPLAY
- VARIABLE INTENSITY DISPLAY
- 10 POINT SCALING (FOR NON-LINEAR PROCESSES)
- FOUR SETPOINT ALARM OUTPUTS (W/OPTION CARD)
- RETRANSMITTED ANALOG OUTPUT (W/OPTION CARD)
- COMMUNICATION AND BUS CAPABILITIES (W/OPTION CARD)
- BUS CAPABILITIES; DEVICENET, MODBUS, AND PROFIBUS-DP
- CRIMSON PROGRAMMING SOFTWARE

PAXI SPECIFICATIONS

MAXIMUM SIGNAL FREQUENCIES TABLE

To determine the maximum frequency for the input(s), first answer the questions with a yes (Y) or no (N). Next determine the Count Mode to be used for the counter(s). If dual counters are used with different Count Modes, then the lowest frequency applies to both counters.

FUNCTION QUESTIONS	Single: Counter A or B (with/without rate) or Rate only								Dual: Counter A & B or Rate not assigned to active single counter							
Are any setpoints used?	N	N	N	N	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	Y
Is Prescaler Output used?	N	N	Y	Y	N	N	Y	Y	N	N	Y	Y	N	N	Y	Y
Is Counter C used?	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y
COUNT MODE	(Values are in KHz)				(Values are in KHz)				(Values are in KHz)				(Values are in KHz)			
Count x1	34	25	21	17	18	15	13	11	13	12	13	11	9	7.5	9	7
Count x2	17	13	16	12	9	7	8	7	9 *	7 *	9 *	7 *	5 *	4 *	5 *	4 *
Quadrature x1	22	19	20	17	12	10	11	10	7 *	6 *	6 *	5 *	4 *	3.5 *	3.5 *	3 *
Quadrature x2	17	13	16	12	9	7	8	6	7 *	6 *	6 *	5 *	4 *	3.5 *	3.5 *	3 *
Quadrature x4	8	6	8	6	4	3	4	3								
Rate Only	34	N/A	21	N/A	34	N/A	21	N/A								

Notes:
1. Counter Modes are explained in the Module 1 programming section.
2. If using Rate with single counter with direction or quadrature, assign it to Input A for the listed frequency.
3. * Double the listed value for Rate frequency.
4. Listed values are with frequency DIP switch set on HI frequency.
5. Derate listed frequencies by 20% during serial communications. (Placing a 5 msec. delay between serial characters will eliminate the derating.)

ANNUNCIATORS:
- A - Counter A
- B - Counter B
- C - Counter C
- r - Rate
- H - Maximum (High) Rate
- L - Minimum (Low) Rate
- OF - Upper significant digit display of counter
- SP1 - setpoint 1 output state
- SP2 - setpoint 2 output state
- SP3 - setpoint 3 output state
- SP4 - setpoint 4 output state

RATE DISPLAY:
- Accuracy: ±0.01%
- Minimum Frequency: 0.01 Hz
- Maximum Frequency: see Max Signal Frequencies Table.
- Maximum Display: 5 Digits: 99999
- Adjustable Display (low) Update: 0.1 to 99.9 seconds
- Over Range Display: "r OLOL"

COUNTER DISPLAYS:
- Maximum display: 8 digits: 99999999 (greater than 6 digits, the display alternates between high order and low order.)

INPUTS A and B:
DIP switch selectable to accept pulses from a variety of sources including switch contacts, TTL outputs, magnetic pickups and all standard RLC sensors.
- LOGIC: Input trigger levels $V_{IL} - 1.5$ V max.; $V_{IH} - 3.75$ V min.
  - Current sinking: Internal 7.8 KΩ pull-up to +12 VDC, $I_{MAX} - 1.9$ mA.
  - Current sourcing: Internal 3.9 KΩ pull-down, 7.3 mA max. @ 28 VDC, $V_{MAX} - 30$ VDC.
  - Filter: Damping capacitor provided for switch contact bounce. Limits input frequency to 50 Hz and input pulse widths to 10 msec. minimum.
- MAGNETIC PICKUP:
  - Sensitivity: 200 mV peak
  - Hysteresis: 100 mV
  - Input impedance: 3.9 KΩ @ 60 Hz
  - Maximum input voltage: 140 V peak, 30 Vrms
- DUAL COUNT MODES:
  When any dual count mode is used, then User Inputs 1 and/or 2 will accept the second signal of each signal pair. The user inputs do not have the Logic/Mag, HI/LO Freq. and Sink/Source input setup switches. The user inputs are inherently a logic input with no low frequency filtering. Any mechanical contacts used for these inputs in a dual count mode must be debounced externally. The user input may only be selected for sink source by the User Jumper placement.

PRESCALER OUTPUT:
NPN Open Collector: $I_{SNK} = 100$ mA max. @ $V_{OL} = 1$ VDC max. $V_{OH} = 30$ VDC max. With duty cycle of 25% min. and 50 % max.

OPTIONAL PLUG-IN OUTPUT CARDS

⚠ **WARNING: Disconnect all power to the unit before installing Plug-in cards.**

Adding Option Cards

The PAX and MPAX series meters can be fitted with up to three optional plug-in cards. The details for each plug-in card can be reviewed in the specification section below. Only one card from each function type can be installed at one time. The function types include Setpoint Alarms (PAXCDS), Communications (PAXCDC), and Analog Output (PAXCDL). The plug-in cards can be installed initially or at a later date.

PAXI COMMUNICATION CARDS (PAXCDC)

A variety of communication protocols are available for the PAX and MPAX series. Only one of these cards can be installed at a time. When programming the unit via Crimson, a Windows® based program, the RS232, RS485 or USB Cards must be used. *Note: For Modbus communications use RS485 Communications Output Card and configure Communication Type parameter (tYPE) for Modbus.*

SERIAL COMMUNICATIONS CARD: PAXCDC1_ and PAXCDC2_
> **Type:** RS485 or RS232
> **Communication Type:** RLC Protocol (ASCII), Modbus RTU, and Modbus ASCII
> **Isolation To Sensor & User Input Commons:** 500 Vrms for 1 min. Not Isolated from all other commons.
> **Data:** 7/8 bits
> **Baud:** 1200 to 38,100
> **Parity:** no, odd or even
> **Bus Address:** Selectable 0 to 99 (RLC Protocol), or 1 to 247 (Modbus Protocol), Max. 32 meters per line (RS485)
> **Transmit Delay:** Selectable for 0 to 0.250 sec (12 msec min)

DEVICENET™ CARD: PAXCDC30
> **Compatibility:** Group 2 Server Only, not UCMM capable
> **Baud Rates:** 125 Kbaud, 250 Kbaud, and 500 Kbaud
> **Bus Interface:** Phillips 82C250 or equivalent with MIS wiring protection per DeviceNet™ Volume I Section 10.2.2.
> **Node Isolation:** Bus powered, isolated node
> **Host Isolation:** 500 Vrms for 1 minute between DeviceNet™ and meter input common.

PAXUSB PROGRAMMING CARD: PAXUSB00
> **Type:** USB Virtual Comms Port
> **Connection:** Type mini B
> **Isolation To Sensor & User Input Commons:** 500 Vrms for 1 min. Not Isolated from all other commons.
> **Baud Rate:** 1200 to 38,400
> **Unit Address:** Selectable 0 to 99 (RLC Protocol), or 1 to 247 (Modbus Protocol)

PROFIBUS-DP CARD: PAXCDC50
> **Fieldbus Type:** Profibus-DP as per EN 50170, implemented with Siemens SPC3 ASIC
> **Conformance:** PNO Certified Profibus-DP Slave Device
> **Baud Rates:** Automatic baud rate detection in the range 9.6 Kbaud to 12 Mbaud
> **Station Address:** 0 to 125, set by rotary switches.
> **Connection:** 9-pin Female D-Sub connector
> **Network Isolation:** 500 Vrms for 1 minute between Profibus network and sensor and user input commons. Not isolated from all other commons.

SETPOINT CARDS (PAXCDS)

The PAX and MPAX series has 4 available setpoint alarm output plug-in cards. Only one of these cards can be installed at a time. (Logic state of the outputs can be reversed in the programming.) These plug-in cards include:

DUAL RELAY CARD: PAXCDS10
> **Type:** Two FORM-C relays
> **Isolation To Sensor & User Input Commons:** 2000 Vrms for 1 min.
> **Contact Rating:**
> > One Relay Energized: 5 amps @ 120/240 VAC or 28 VDC (resistive load). Total current with both relays energized not to exceed 5 amps

Life Expectancy: 100 K cycles min. at full load rating. External RC snubber extends relay life for operation with inductive loads

QUAD RELAY CARD: PAXCDS20
> **Type:** Four FORM-A relays
> **Isolation To Sensor & User Input Commons:** 2300 Vrms for 1 min.
> **Contact Rating:**
> > One Relay Energized: 3 amps @ 250 VAC or 30 VDC (resistive load). Total current with all four relays energized not to exceed 4 amps
> **Life Expectancy:** 100K cycles min. at full load rating. External RC snubber extends relay life for operation with inductive loads

QUAD SINKING OPEN COLLECTOR CARD: PAXCDS30
> **Type:** Four isolated sinking NPN transistors.
> **Isolation To Sensor & User Input Commons:** 500 Vrms for 1 min. Not Isolated from all other commons.
> **Rating:** 100 mA max @ V_{SAI} − 0.7 V max. V_{MAX} − 30 V

QUAD SOURCING OPEN COLLECTOR CARD: PAXCDS40
> **Type:** Four isolated sourcing PNP transistors.
> **Isolation To Sensor & User Input Commons:** 500 Vrms for 1 min. Not Isolated from all other commons.
> **Rating:** Internal supply: 24 VDC ± 10% , 30 mA max. total External supply: 30 VDC max., 100 mA max. each output

DUAL TRIAC/DUAL SSR DRIVE CARD: PAXCDS50
> **Triac:**
> > **Type:** Isolated, zero crossing detection
> > **Voltage:** 260 VAC max., 20 VAC min.
> > **Max Load Current:** 1 Amp @ 25°C
> > 0.75 Amp @ 50°C
> > Total load current with both triacs ON not to exceed 1.5 Amps
> > **Min Load Current:** 5 mA
> > **Off State Leakage Current:** 1 mA max @ 60 Hz
> > **Operating Frequency:** 20-400 Hz
> **SSR Drive:**
> > **Type:** Two isolated sourcing PNP Transistors.
> > **Isolation To Sensor & User Input Commons:** 500 Vrms for 1 min. Not Isolated from all other commons.
> > **Rating:**
> > > Output Voltage: 18/24 VDC (unit dependent) = 10%, 30 mA max. total both outputs

QUAD FORM C RELAY CARD: PAXCDS60
> **Type:** Four FORM-C relays
> **Isolation To Sensor & User Input Commons:** 500 Vrms for 1 min.
> **Contact Rating:**
> > Rated Load: 3 Amp @ 30 VDC/125 VAC
> > Total Current With All Four Relays Energized not to exceed 4 amps
> **Life Expectancy:** 100 K cycles min. at full load rating. External RC snubber extends relay life for operation with inductive loads

PAXI ANALOG OUTPUT CARD (PAXCDL)

Either a 0(4)-20 mA or 0-10 V retransmitted linear DC output is available from the analog output plug-in card. The programmable output low and high scaling can be based on various display values. Reverse slope output is possible by reversing the scaling point positions.

ANALOG OUTPUT CARD: PAXCDL10 - Self-Powered Output (Active)
> **Types:** 0 to 20 mA, 4 to 20 mA or 0 to 10 VDC
> **Isolation To Sensor & User Input Commons:** 500 Vrms for 1 min. Not Isolated from all other commons.
> **Accuracy:** 0.17% of FS (18 to 28°C); 0.4% of FS (0 to 50°C)
> **Resolution:** 1 3500
> **Compliance:** 10 VDC: 10 KΩ load min., 20 mA: 500 Ω load max.
> **Response Time:** 50 msec. max., 10 msec. typ.