IECO Scan Amplifier Interface			
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Applications	Interfacing IECO scan amplifiers to Pyramid controls		
Specifications			
Amplifier interfaces	Two, independent (X and Y axes) suitable for direct connection to IECO GIU 15-pin connectors.		
M10 interfaces	Three, for X amplifier channel control, Y amplifier channel control, redun- dant current sensor readout.		
LEM sensor support	Power and readout compatible with LEM IT400 and LEM IT700 sensors.		
LEM signal conditioning	Burden resistor 2.50 ohm 1 watt. Differential amplifier voltage gain 14.05. Conversion gain for IT400 sensor 0.0175 V A-1. Conversion gain for IT700 sensor 0.0200 V A-1. Low pass filtering four pole 15 kHz (- 3dB)		
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Specifications (continued)

Power output	Three +24 VDC outputs for M10 power. Two +15 VDC outputs for LEM sensor power, 1A max. Fused 1.1A. Two –15 VDC outputs for LEM sensor power, 1A max. Fused 1.1A.			
Power input	+24 +/-2 VDC, 1100 mA max. Fused 1.1 A.			
Indicators	Three LEDs, +24 V power, +15 V power, -15 V power			
Case	Stainless	s steel sheet with mounting	l flange	e, IP43.
Weight	0.27kg ((0.59 lb)		
Operating environment	10 to 350 100Hz	C, < 80% humidity, non-co	ndensi	ng, vibration < 1g all axes, 1 to
Storage environment	0 to 50C, < 80% humidity, non-condensing, vibration < 2g all axes, 1 to 100Hz			
Connectors				
+24 VDC input	2.1 mm threaded jack. Mate with Switchcraft S761K or equivalent. Pin: +24 VDC; Shell: 0V Power routed to M10 devices via DSub connectors			
IECO GIU interface	Two (X and Y axes), 15 pin DSub female			
	1	n/c	9	Current program +
	2	Current program -	10	n/c
	3	n/c	11	Reset
	4	Voltage monitor +	12	Voltage monitor -
	5	Enable	13	Current monitor +
	6	DGnd	14	Status
	7	Current monitor -	15	n/c
	8	n/c		
LEM sensor interface Two (X and Y axes), 9 pin DSub female				
	1	Signal -	6	Signal +
	2	n/c	7	n/c
	3	n/c	8	n/c
	4	AGnd	9	+15 VDC
	5	-15 VDC		

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Connectors (continued)

M10 (axis control)

Two (X and Y), 25 pin DSub male

1	PSU 0V (24V return)	14	+24 V DC
2	n/c	15	n/c
3	Current monitor +	16	Current monitor -
4	Enable	17	Reset
5	Voltage monitor +	18	Voltage monitor -
6	Current program -	19	Current program +
7	n/c	20	n/c
8	n/c	21	n/c
9	DGnd	22	n/c
10	n/c	23	n/c
11	n/c	24	n/c
12	n/c	25	Status
13	n/c		

M10 (LEM sensor read) One, 25 pin DSub male

1	PSU 0V (24V return)	14	+24 V DC
2	n/c	15	n/c
3	Sensor 1 (X axis) signal	16	AGnd
4	n/c	17	n/c
5	Sensor 1 (Y axis) signal	18	AGnd
6	n/c	19	n/c
7	n/c	20	n/c
8	n/c	21	n/c
9	n/c	22	n/c
10	n/c	23	n/c
11	n/c	24	n/c
12	n/c	25	n/c
13	n/c		

Ground

Case grounded via mounting flange



Typical installation



M10 signal allocation

M10	Signal	Allocation
X or Y control	AO_01	Current demand
	AI_01	Current monitor
	AI_02	Voltage monitor
	DO_01	Enable (high to enable)
	DO_02	Reset (pulse low to reset)
	DI_01	Status (high = good)
LEM sensor readout	AI_01	Sensor 1 (X axis)
	AI_02	Sensor 2 (Y axis)





