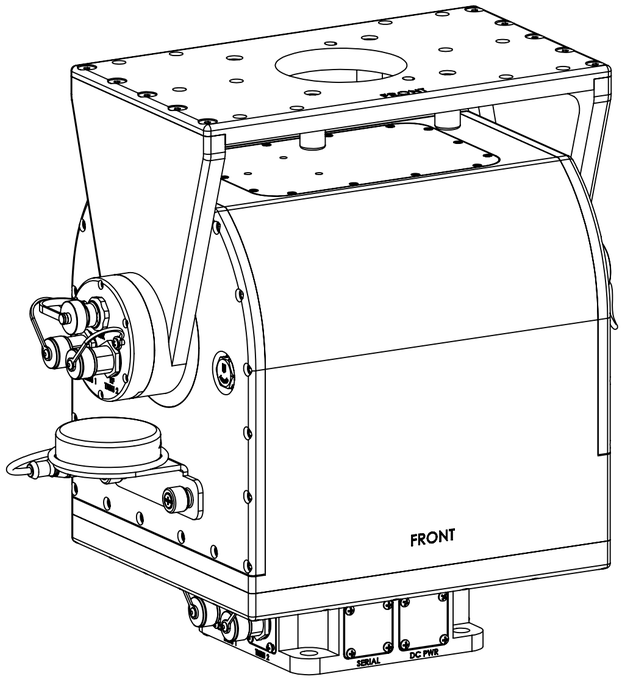
REV	DESCRIPTION	DATE	APPROVED
B	CN600935	2021-04-01	CLC

NOTES: UNLESS OTHERWISE SPECIFIED

1. LINKALIGN-360MPT-30 CONFIGURABLE OPTIONS PER TABLE I
2. USE INTERFACE CONTROL DRAWING IN CONJUNCTION WITH DATASHEET N500191
3. SEE TABLE II FOR AVAILABLE LINKALIGN-360MPT-30 ACCESSORY OPTIONS
4. POSITIONER POWERED BY POWER OVER ETHERNET 50-57 VDC, 4 PAIR, PoH (INDOOR RATED 54 VDC POWER SUPPLY INCLUDED WITH POSITIONER. NOT SHOWN IN DRAWING). OPTIONAL DC POWER INPUT MAY BE USED AS ALTERNATE CUSTOM CONFIGURATION, 20-60 V. STANDBY POWER DRAWS LESS THAN 16 W. MAXIMUM POWER DRAW, 95 W
5. EXTERNAL CONSTRUCTION COMPRISED OF HARD COAT ANODIZE ALUMINUM WITH STAINLESS STEEL HARDWARE
6. 540° (+/-270°) AZIMUTH TRAVEL WITH UPT TO 16°/SEC DRIVE RATE (MAX LOAD)
7. 190° (+/-95°) ELEVATION TRAVEL WITH UP TO 5°/SEC DRIVE RATE (MAX LOAD)
8. -22° TO 140°F (-30° TO 60°C) OPERATIONAL TEMPERATURE RANGE. -40° TO 158°F (-40 TO 70°C) NON-OPERATIONAL TEMPERATURE RANGE
9. 0.01° FEEDBACK RESOLUTION
10. AZIMUTH AND ELEVATION BACKLASH LESS THAN 0.1°
11. 13.50" (34.3 cm) HIGH X 14.46" (36.7 cm) WIDE X 8.25" (21.0 cm) DEEP. DIMENSIONS APPLY WHEN POSITIONER IS AT 0° AZIMUTH AND 0° ELEVATION ANGLES
12. WEIGHT APPROXIMATELY 40.5 LBS (18.4 kg)
13. PAYLOAD NOT TO EXCEED 100 LBS (45.4 kg) OR 55 FT-LBS (75 Nm) OF TORQUE ABOUT THE ELEVATION AXIS. TO CALCULATE TORQUE, TAKE THE DISTANCE FROM THE PAYLOAD CENTER OF GRAVITY TO DATUM -B- IN FEET AND MULTIPLY BY THE PAYLOAD WEIGHT. MAXIMUM OPERATING TORQUE MAY BE REDUCED AT TEMPERATURES BELOW 5°F (-15°C) AND/OR WITH PERIPHERAL DEVICES
14. TABLE TOP MOUNTING HOLES
15. CENTER OF GRAVITY 0.2" (0.5 cm) IN THE X-DIRECTION, 6.2" (15.7cm) IN THE Y-DIRECTION AND 0" (0 cm) IN THE Z-DIRECTION
16. STANDARD PASS THRU CONNECTORS USE DC-3 GHz RF, 20" (50 cm) INTERNAL LENGTH
17. OPTIONAL SIGNAL PASS THRU CONNECTORS USE 39" (100 cm) INTERNAL LENGTH , 24 AWG WIRE ABLE TO CARRY 60 VAC / 75 VDC, 2A



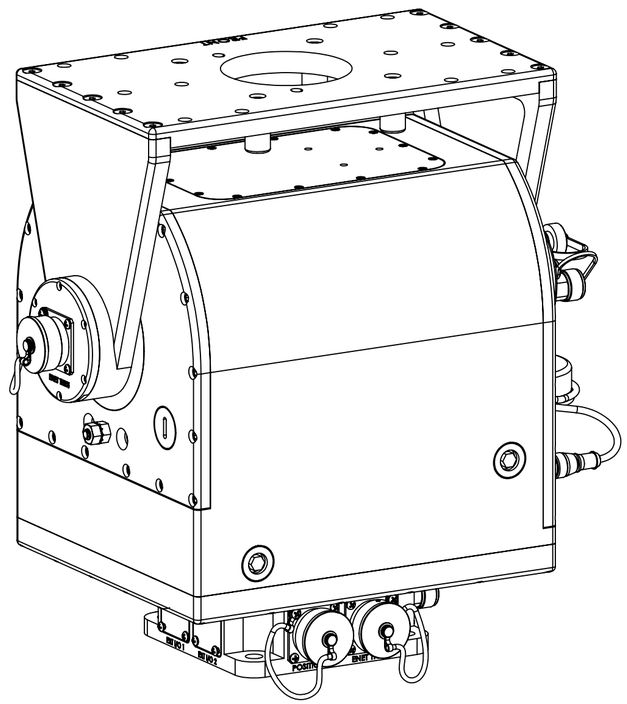


TABLE I

BUILDING A PART NUMBER ***STANDARD OPTIONS***

LA-360MPT - 30 - ____ - 100 <<EXAMPLE

SHIELDED ETHERNET CABLE STANDARD LENGTHS

050 = 50 ft
100 = 100 ft
150 = 150 ft
200 = 200 ft
250 = 250 ft
300 = 300 ft
XXX = Custom length in feet
XXXC = Add "C" to end of cable length for unterminated mating connector

CUSTOM CONFIGURATION

= Standard options - leave blank

MOTOR DRIVES AND PAYLOAD

30 = Az Travel @ 16°/s, EL Travel @ 5°/s, El torque 55 ft-lbs, 100 lb payload. Typically paired with 2-3 ft antennas

MODEL

LA-360MPT = LinkAlign-360MPT (+/-270° azimuth, +/-95° elevation)

TABLE II (ACCESSORY OPTIONS)

ACCESSORY DESCRIPTION	ACCESSORY PART NUMBER	ACCESSORY ICD
LINKALIGN-360POL-10 POLARIZATION POSITIONER	LA-360POL-10-X	ICDN900387
QUICKMOUNT 2 INCH OD MAST ADAPTER	ACC-N900728-1	ICDN900728
TRIPOD ASSEMBLY, LIGHTWEIGHT, FOLDING, 2 INCH OD MAST	ACC-N900320-1	ICDN900320
TRIPOD ASSEMBLY, HEAVY DUTY, 2 INCH OD MAST	ACC-N900413-1	ICDN900413
TRIPOD ASSEMBLY, LIGHTWEIGHT, 2 INCH OD MAST	ACC-N900868-1	ICDN900868
QUADPOD ASSEMBLY, LIGHTWEIGHT, 2 INCH OD MAST	ACC-N900869-1	ICDN900869

SYMBOL KEY: NOTE, PL ITEMS

PROPRIETARY AND CONFIDENTIAL
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NEXTMOVE TECHNOLOGIES, LLC
HOLLIS, NH 03049
www.nextmovetech.com

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
ANGLE ± .5 DEGREES
TWO PLACE DECIMAL ±.030
THREE PLACE DECIMAL ±.010
INTERPRET DIM AND TOL PER ASME Y14.5M - 1994

THIRD ANGLE PROJECTION
DO NOT SCALE DRAWING

DRAWN	C. CHEYNE	2021-03-30
CHECKED	S. CHEYNE	2021-03-30
ME APPR.	C. CHEYNE	2021-03-30
EE APPR.		

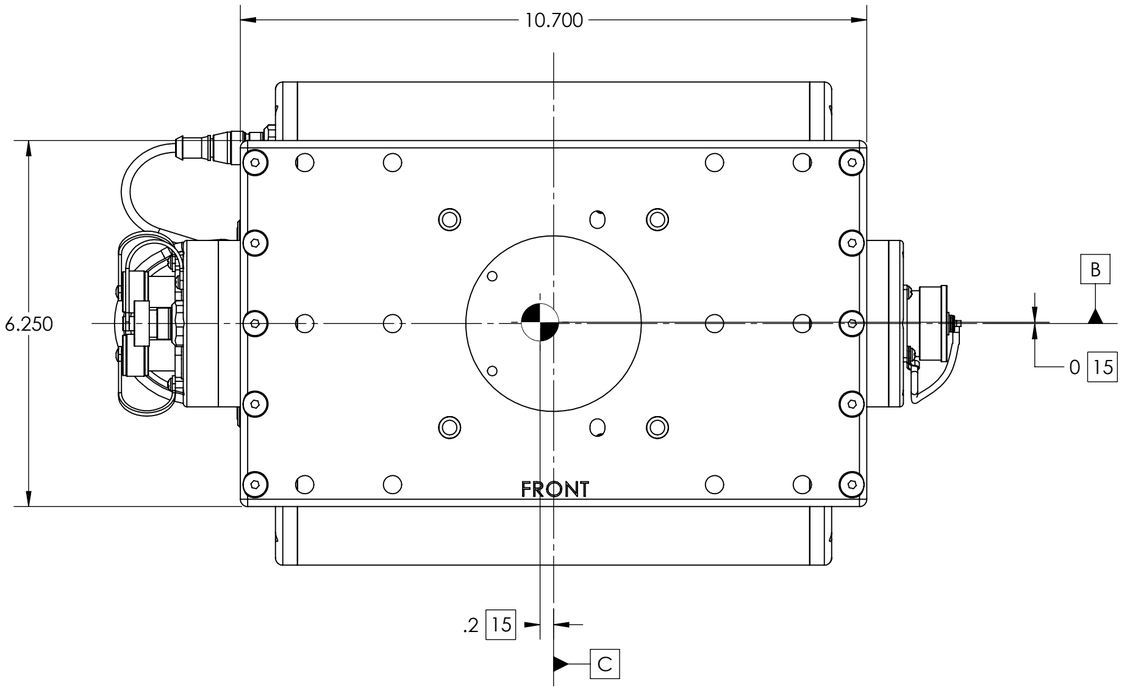
PART NO. SEE TABLE I

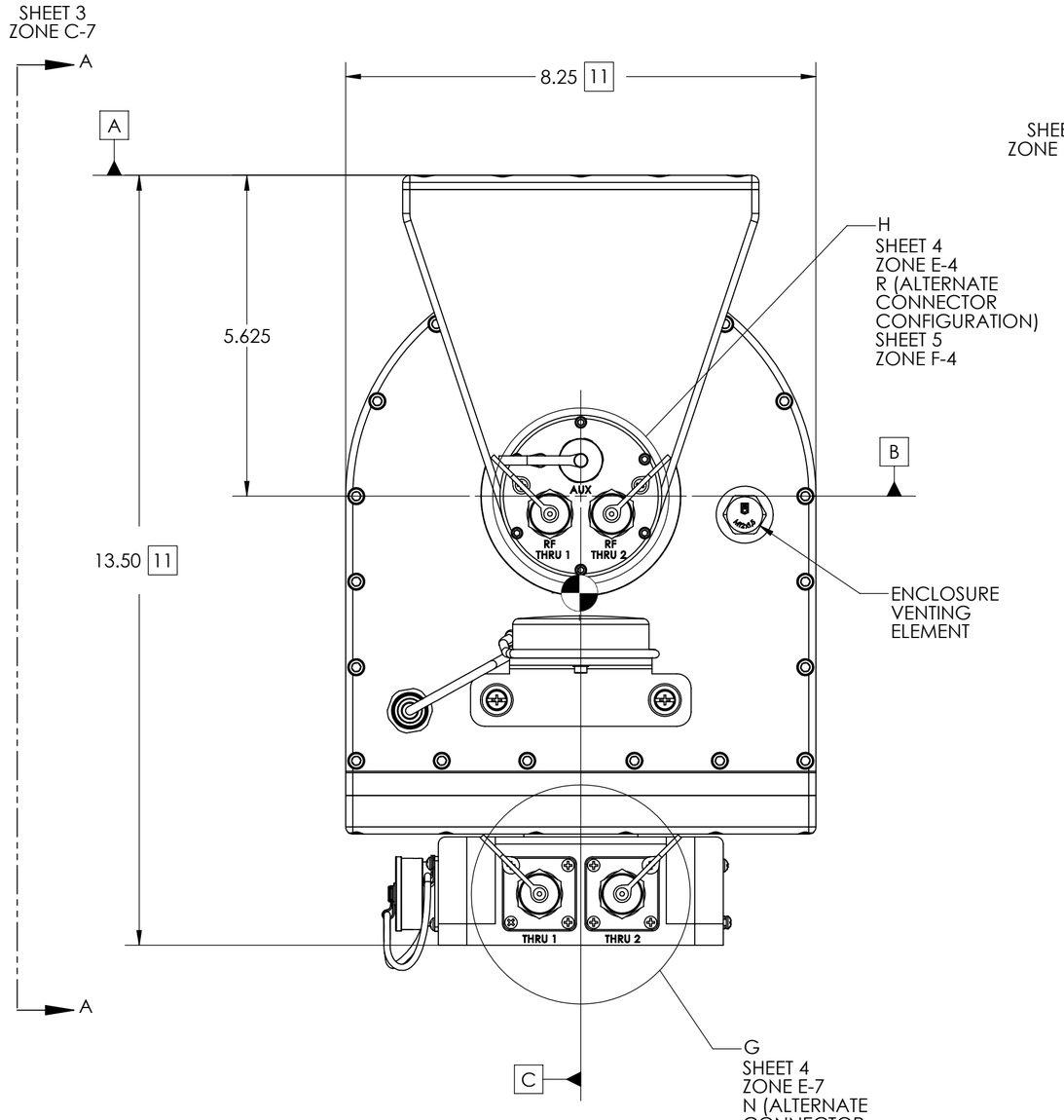
NEXTMOVE TECHNOLOGIES

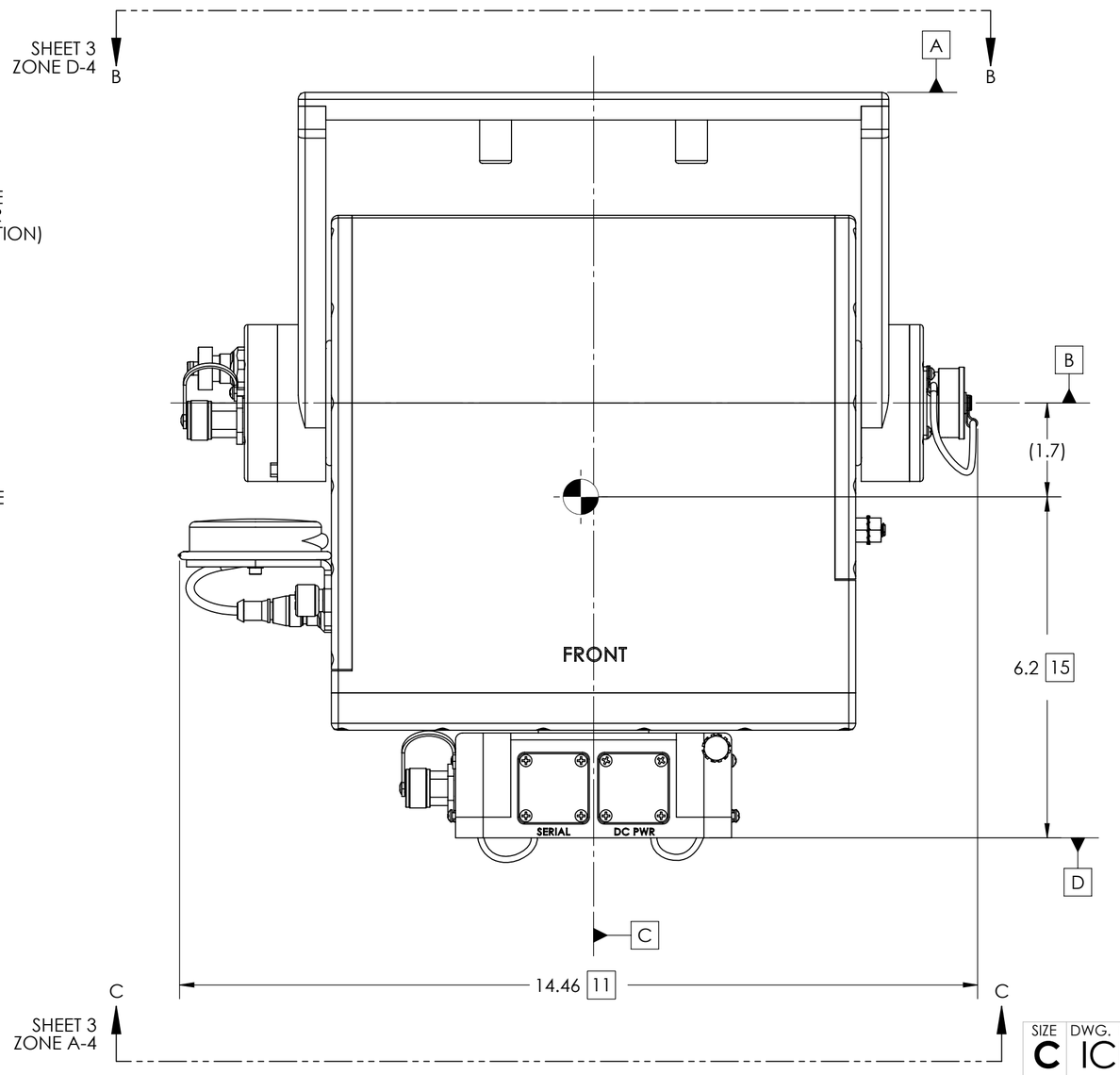
TITLE: INTERFACE CONTROL DRAWING, LINKALIGN-360MPT-30

SIZE	DWG. NO.	REV
C	ICDN900850	B

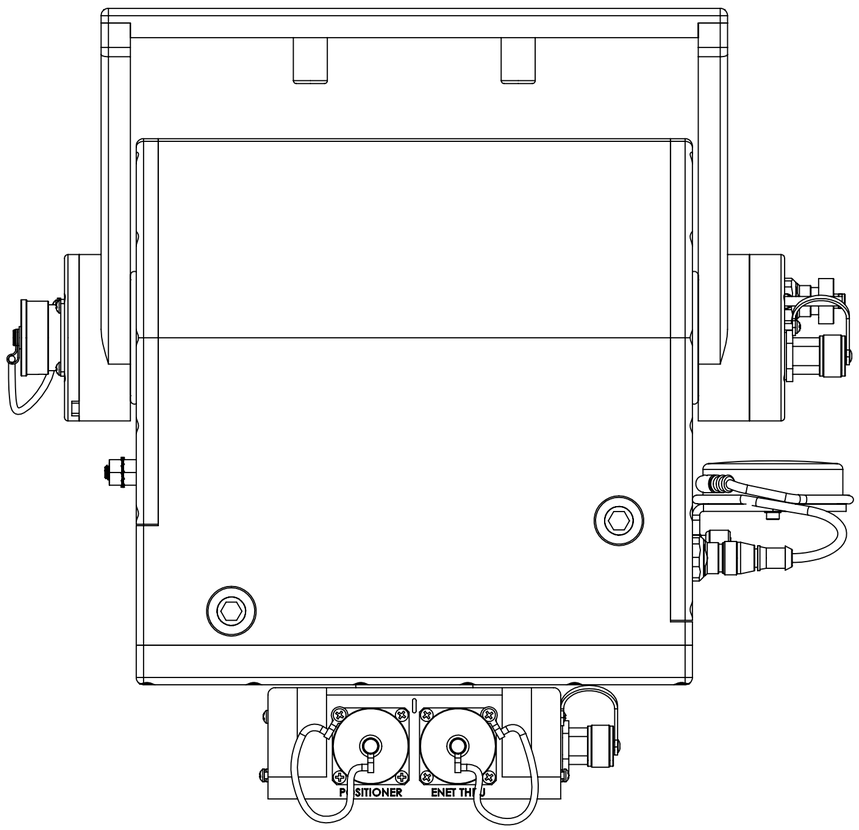
SCALE: 3:8 SHEET 1 OF 5

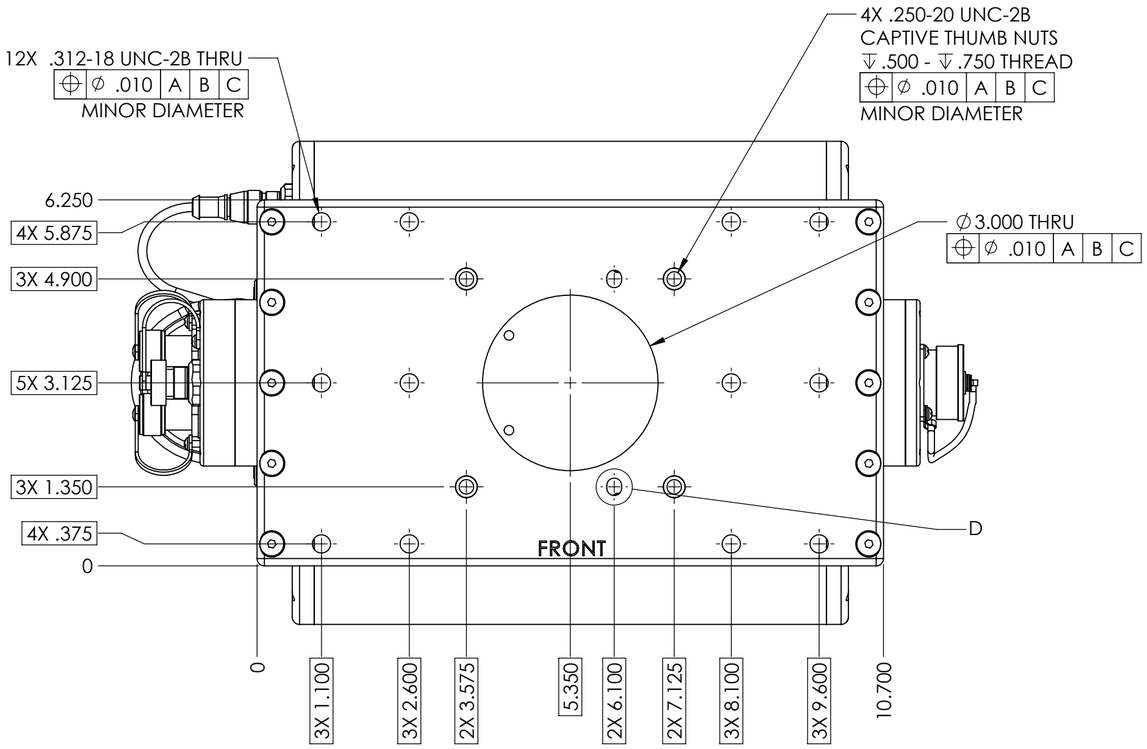




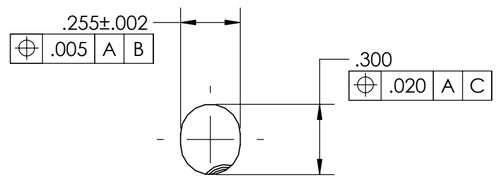


SIZE	DWG. NO.
C	ICDN900850
SCALE: 1:2	SHEET 2 OF 5



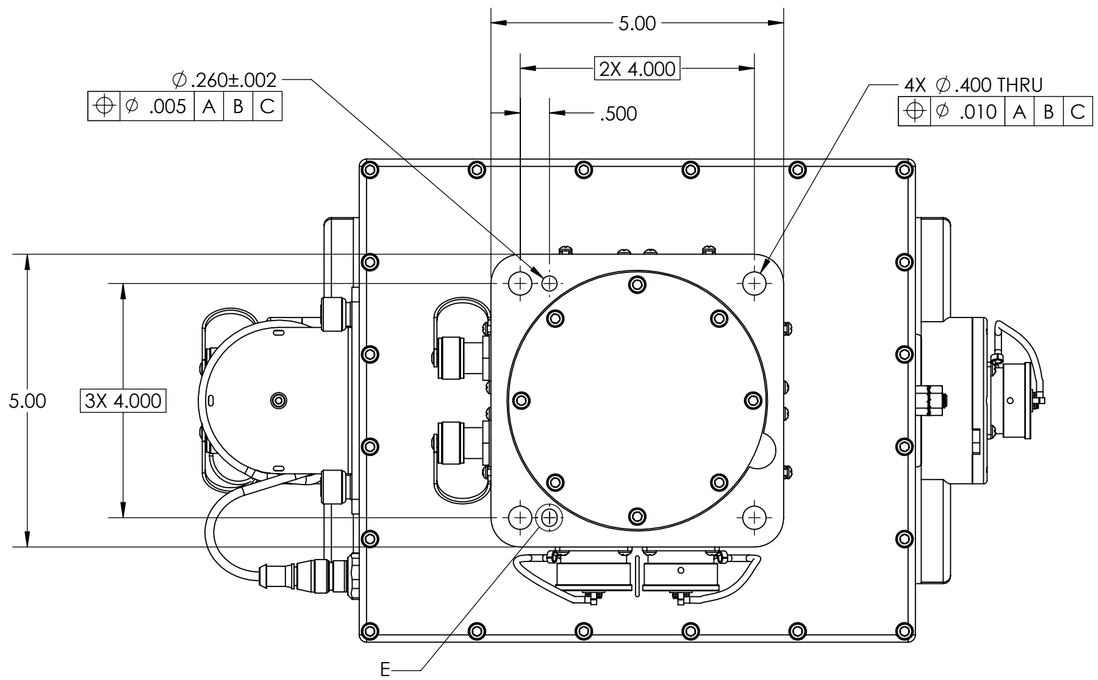


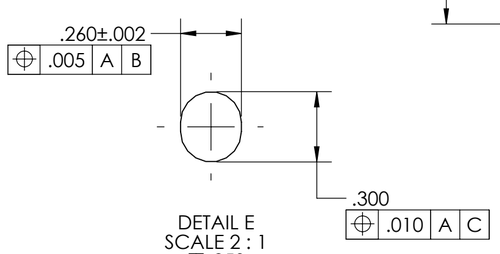
VIEW B-B
SCALE 1 : 2
SHEET 2
ZONE D-5



DETAIL D
SCALE 2 : 1
2 PLACES

VIEW A-A
SCALE 1 : 2
SHEET 2
ZONE D-8



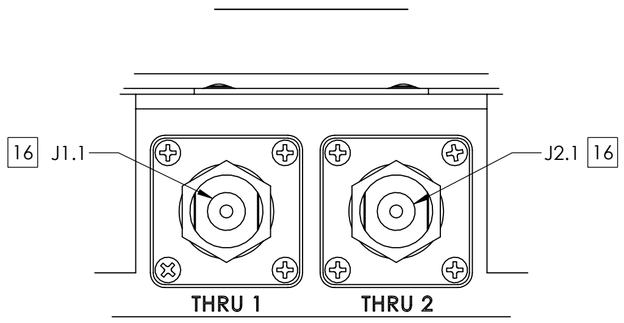


DETAIL E
SCALE 2 : 1
↧ .250

VIEW C-C
SCALE 1 : 2
SHEET 2
ZONE A-5
TABLE TOP MOUNTING HOLES

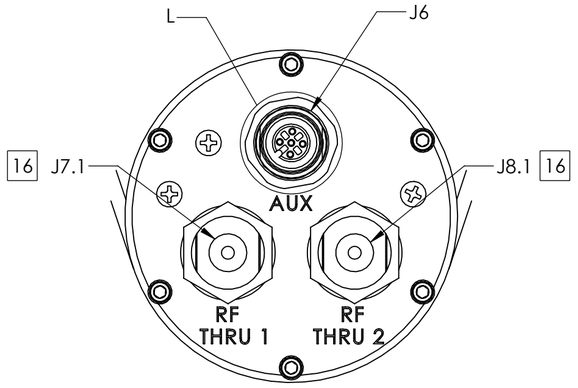
14

SIZE	DWG. NO.
C	ICDN900850
SCALE: 3:8	SHEET 3 OF 5



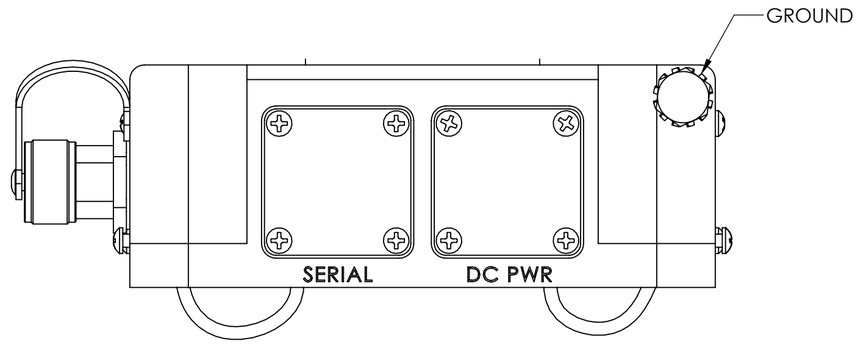
DETAIL G
SCALE 1 : 1
SHEET 2 ZONE A-6

SHOWN WITHOUT PROTECTIVE CAPS
SEE TABLE V FOR STANDARD CONNECTOR PINOUT DETAILS
SEE SHEET 5 DETAIL N ZONE E-7 FOR
ALTERNATE CONNECTOR CONFIGURATIONS



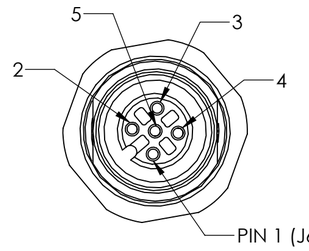
DETAIL H
SCALE 1 : 1
SHEET 2 ZONE C-5

SHOWN WITHOUT PROTECTIVE CAPS
SEE TABLE V FOR STANDARD CONNECTOR PINOUT DETAILS
SEE SHEET 5 DETAIL T ZONE E-4 FOR ALTERNATE
CONNECTOR CONFIGURATIONS



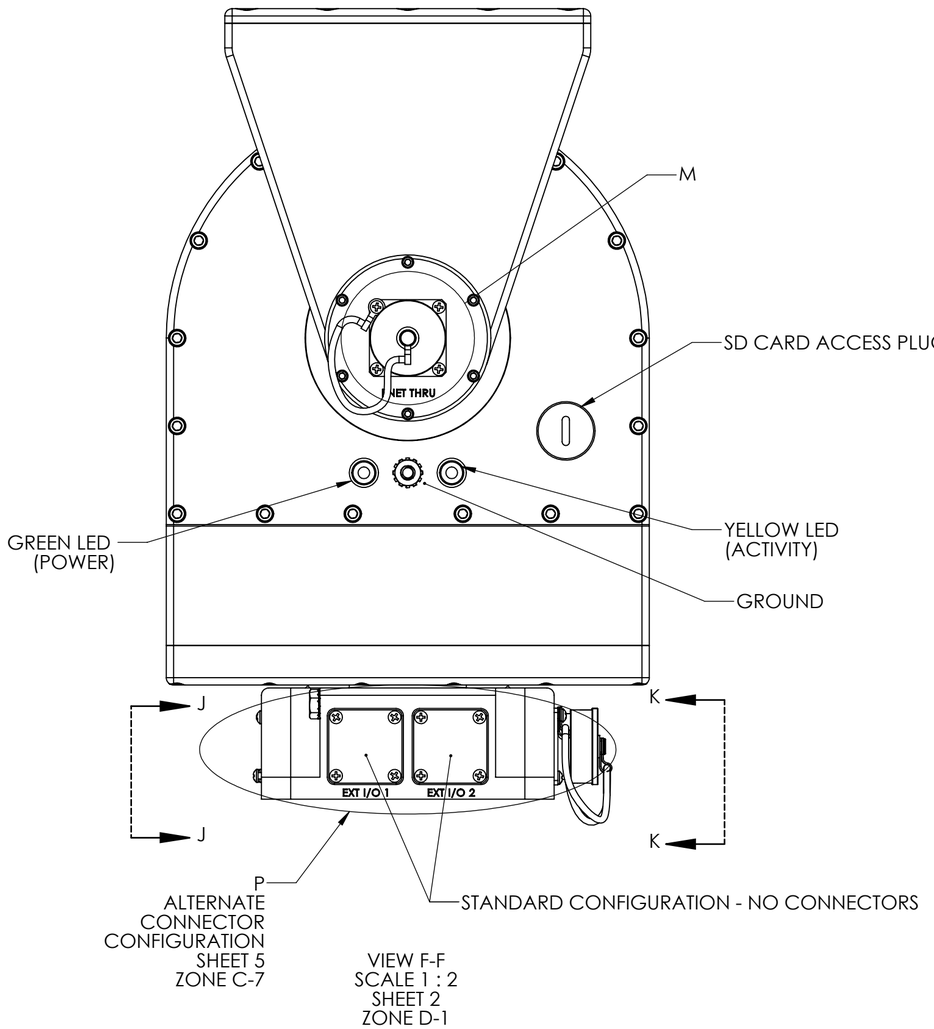
VIEW J-J
SCALE 1 : 1

STANDARD CONFIGURATION - NO CONNECTORS
SEE SHEET 5 VIEW R ZONE A-7 FOR ALTERNATE
CONNECTOR CONFIGURATIONS

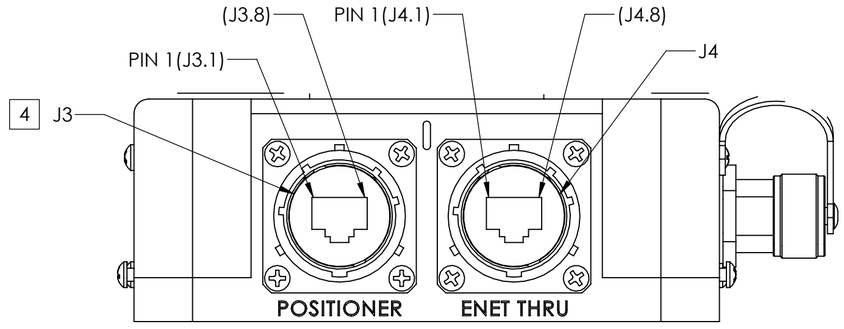


J6 CONNECTOR SHOWN FROM MATING SIDE
MATES WITH TURCK P/N RS 4.5-T-* (*LENGTH IN METERS)

DETAIL L
SCALE 2 : 1
SEE TABLE IV FOR PINOUT DETAILS

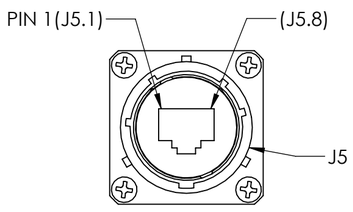


VIEW F-F
SCALE 1 : 2
SHEET 2
ZONE D-1



J3 & J4 CONNECTOR SHOWN FROM MATING SIDE
MATES WITH AMPHENOL P/N - RJF6B

VIEW K-K
SCALE 1 : 1
SHOWN WITHOUT PROTECTIVE CAPS
SEE TABLE III FOR J3 PINOUT DETAILS & TABLE V FOR J4 PINOUT DETAILS



ENET THRU

J5 CONNECTOR SHOWN FROM MATING SIDE
MATES WITH AMPHENOL P/N - RJF6B

DETAIL M
SCALE 1 : 1
SHOWN WITHOUT PROTECTIVE CAP
SEE TABLE V FOR PINOUT DETAILS

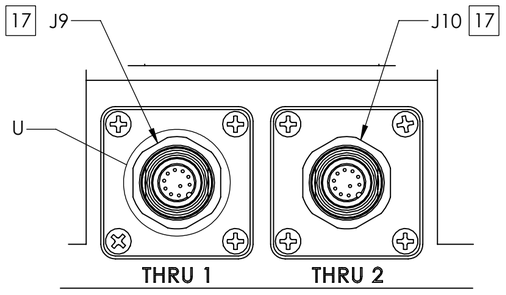
TABLE III (PoE CONNECTOR)	
CONNECTOR DESIGNATION	**FUNCTION**
J3.1	DATA PAIR 1
J3.2	DATA PAIR 1
J3.3	DATA PAIR 2
J3.4	+50-57 VDC PoE POWER INPUT
J3.5	+50-57 VDC PoE POWER INPUT
J3.6	DATA PAIR 2
J3.7	DC RETURN FOR PoE INPUT
J3.8	DC RETURN FOR PoE INPUT

TABLE IV (AUX/POLARIZATION CONNECTOR)	
CONNECTOR DESIGNATION	**FUNCTION**
J6.1	GND
J6.2	+/-12 VDC MOTOR
J6.3	+/-12 VDC MOTOR
J6.4	POT WIPER
J6.5	+3.3V

TABLE V (PASS THRU CONNECTORS)	
FROM	**TO**
J1.1	J7.1
J2.1	J8.1
J4.1	J5.1
↓	↓
J4.8	J5.8

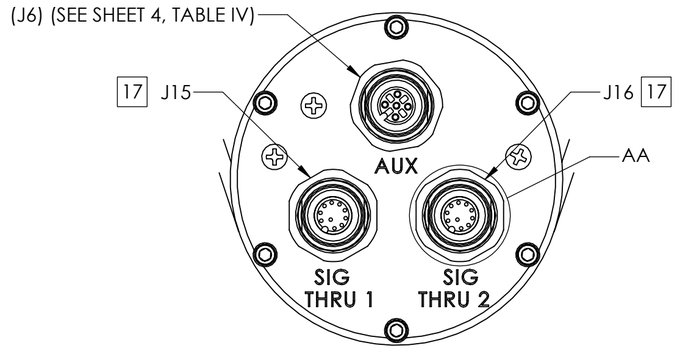
SIZE	DWG. NO.
C	ICDN900850
SCALE: 3:8	SHEET 4 OF 5

ALTERNATE CONNECTOR CONFIGURATIONS



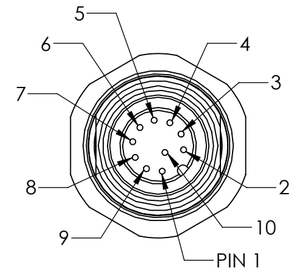
DETAIL N
SCALE 1 : 1
SHEET 2 ZONE A-6

SHOWN WITHOUT PROTECTIVE CAPS
SEE TABLE IX FOR FOR ALTERNATE CONNECTOR CONFIGURATIONS



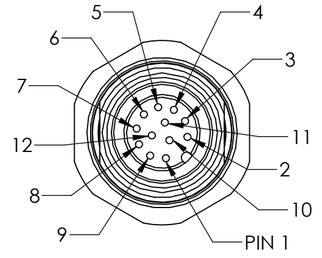
DETAIL T
SCALE 1 : 1
SHEET 2 ZONE C-6

SHOWN WITHOUT PROTECTIVE CAPS
SEE TABLE VII FOR FOR ALTERNATE CONNECTOR CONFIGURATIONS



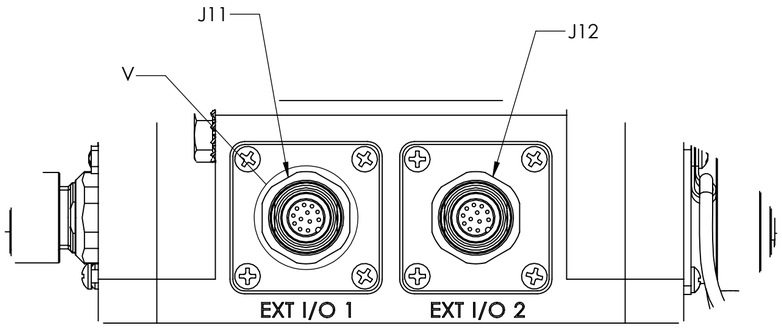
J9 & J10 CONNECTORS,
SHOWN FROM MATING SIDE,
MATES WITH TURCK
P/N RK 10-T-* (* LENGTH IN METERS)

DETAIL U
SCALE 2 : 1
2 PLACES
SEE TABLE VIII FOR
CONNECTOR PINOUT DETAILS



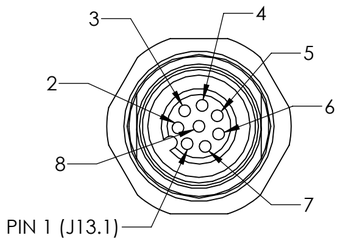
J11 & J12 CONNECTORS,
SHOWN FROM MATING SIDE,
MATES WITH TURCK
P/N RK 12-T-* (* LENGTH IN METERS)

DETAIL V
SCALE 2 : 1
2 PLACES
SEE TABLE VI FOR
CONNECTOR PINOUT DETAILS



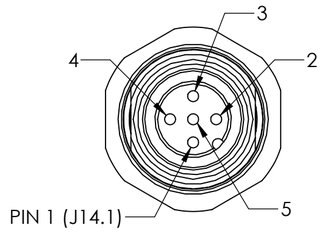
DETAIL P
SCALE 1 : 1
SHEET 4 ZONE A-8

SHOWN WITHOUT PROTECTIVE CAPS
SEE TABLE VI FOR FOR ALTERNATE CONNECTOR CONFIGURATIONS



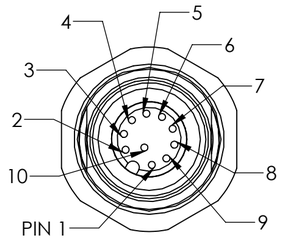
J13 CONNECTOR,
SHOWN FROM MATING SIDE,
MATES WITH TURCK
P/N RS 8-T-* (* LENGTH IN METERS)

DETAIL W
SCALE 2 : 1
SEE TABLE VII FOR
CONNECTOR PINOUT DETAILS



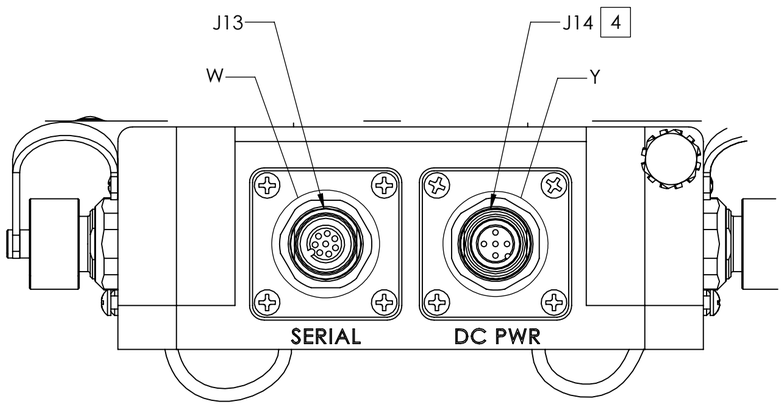
J14 CONNECTOR,
SHOWN FROM MATING SIDE,
MATES WITH TURCK
P/N RK 4.5-T-* (* LENGTH IN METERS)

DETAIL Y
SCALE 2 : 1
SEE TABLE VIII FOR
CONNECTOR PINOUT DETAILS



J15 & J16 CONNECTORS,
SHOWN FROM MATING SIDE,
MATES WITH TURCK
P/N RS 10T-* (* LENGTH IN METERS)

DETAIL AA
SCALE 2 : 1
2 PLACES
SEE TABLE IX FOR
CONNECTOR PINOUT DETAILS



DETAIL R
SCALE 1 : 1
SHEET 4 ZONE E-2

SHOWN WITHOUT PROTECTIVE CAPS
SEE TABLE VII & VIII FOR FOR ALTERNATE CONNECTOR CONFIGURATIONS

TABLE VI (EXT I/O)	
CONNECTOR DESIGNATION	**FUNCTION**
J11.1	ADC_1+
J11.2	GND
J11.3	IN2, IN_GPIO_1_27
J11.4	IN1, IN_GPIO_1_16
J11.5	COM
J11.6	IN3, IN_GPIO_1_24
J11.7	OUT1, OUT_GPIO_1_15
J11.8	OUT4, OUT_GPIO_1_22
J11.9	ADC_1-
J11.10	OUT3, OUT_GPIO_1_21
J11.11	IN4, IN_GPIO_1_14
J11.12	OUT2, OUT_GPIO_1_17
J12.1	ADC_2+
J12.2	GND
J12.3	IN6, IN_GPIO_0_6
J12.4	IN5, IN_GPIO_3_16
J12.5	COM
J12.6	IN7, IN_GPIO_1_26
J12.7	OUT5, OUT_GPIO_0_13
J12.8	OUT8, OUT_GPIO_1_28
J12.9	ADC_2-
J12.10	OUT7, OUT_GPIO_1_25
J12.11	IN 8, IN_GPIO_2_0
J12.12	OUT6, OUT_GPIO_3_21

TABLE VII (SERIAL CONNECTOR)	
CONNECTOR DESIGNATION	**FUNCTION**
J13.1	5V
J13.2	GND
J13.3	12V
J13.4	GND
J13.5	RS232, UART4 Tx
J13.6	RS232, UART4 Rx
J13.7	RS232, UART5 Tx
J13.8	RS232, UART5 Rx

TABLE VIII (POWER CONNECTOR)	
CONNECTOR DESIGNATION	**FUNCTION**
J14.1	N/C
J14.2	N/C
J14.3	+20-60 VDC POWER INPUT
J14.4	N/C
J14.5	GND

TABLE IX (PASS THRU CONNECTORS)	
FROM	**TO**
J9.1	J15.1
↓	↓
J9.10	J15.10
J10.1	J16.1
↓	↓
J10.10	J16.10

SIZE C | DWG. NO. ICDN900850
SCALE: 1:1 | SHEET 5 OF 5