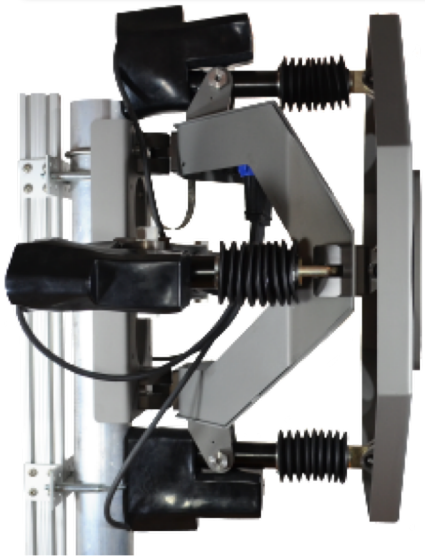
QLA-15LPT-40

AUTO ACQUISITION ANTENNA POSITIONER FOR MICROWAVE LINE OF SIGHT



The QLA-15LPT-40 is an antenna positioner designed from the ground up to automatically maintain microwave line of sight communication links for 4-6 ft antennas. Narrow beam antennas often require realignment due to seasonal fading of misalignment caused by wind loading.

The full featured web based user interface provides rapid and accurate antenna realignment. The user interface includes remote signal strength monitoring and auto peaking tools that can automatically trigger antenna realignment based on radio signal strength.

The QLA-15LPT-40 is typically paired with 4-6 ft antennas, payloads up to 300 lbs (136.1 kg), and offers +/-15° of azimuth and elevation range. Download the Interface Control Drawing (ICD) for more details.

TECHNICAL SPECIFICATIONS – QLA-15LPT-40	
Power	48VDC
Material / Finish	Aluminum with stainless steel hardware / Hard coat anodize
Positioner Travel	
Azimuth	15° (+/-7.5°)
Elevation	15° (+/-7.5°)
Positioner Drive Rate	
Azimuth	Variable, up to 0.5°/sec no load
Elevation	Variable, up to 0.5°/sec no load
Temperature	
Operational	-22 to 140°F (-30 to 60°C)
Survival	-40 to 158°F (-40 to 70°C)
Az / El Repeatability	+/-0.05°
Torque	
Operational (both axes)	500 ft-lbs (677.9 Nm)
Survival (both axes)	1000 ft-lbs (1355.8 Nm)
Payload	300 lbs (136.1 kg)
Dimensions	Height: 37.0" (94.0 cm), Width: 37.0" (94.0 cm), Depth: 22.5" (57.2 cm)
Weight	130 lbs (59.0 kg)
Mounting Interface	Clamps standard to a 4.5" dia mast (11.4 cm)
Antenna Mount Options	Any commercial antenna between 4 and 6 feet in diameter
Communication Interface	
User Interfaces	Web based hosted internal to unit, Pelco I
Ethernet	10/100 Ethernet
Serial	RS-485
REV G	Specifications subject to change without notice

Q-PAR Antennas USA, LLC – sales@qparusa.com – Tel: 702-208-9973 – Fax: 702-208-9984

REV	DESCRIPTION	DATE	APPROVED
C	CN600564	2018-07-23	CLC

NOTES: UNLESS OTHERWISE SPECIFIED

1. QLA-15LPT-40 CONFIGURABLE OPTIONS PER TABLE I. PART NUMBER LA-15LPT-40-NCI-NCI SHOWN THROUGHOUT THIS DRAWING.
2. USE INTERFACE CONTROL DRAWING IN CONJUNCTION WITH DATASHEET N500109
3. INPUT POWER SHALL BE NOMINALLY 48VDC (45VDC TO 55VDC)
4. HARD COAT ANNODIZE ALUMINUM CONSTRUCTION WITH STAINLESS STEEL HARDWARE
5. 15° (+/-7.5°) AZIMUTH TRAVEL WITH 0.25°/SEC DRIVE RATE
6. 15° (+/-7.5°) ELEVATION TRAVEL WITH 0.25°/SEC DRIVE RATE
7. -22 TO 140°F (-30 TO 60°C) OPERATIONAL TEMPERATURE RANGE. -40 TO 158°F (-40 TO 70°C) NON-OPERATIONAL TEMPERATURE RANGE
8. +/-0.1° PAN/TILT REPEATABILITY
9. 65 MPH (104KPH) OPERATIONAL WIND SPEED WITH GUSTS UP TO 80 MPH (128 KPH). 124 MPH (200 KPH) SURVIVAL WIND SPEED. ASSUMES 6' DIAMETER DISH WITH RADOME
10. 39" (99 cm) HIGH X 39" (99 cm) WIDE X 22" (56 cm) DEEP. DEPTH MEASURED TO CENTER OF 4.5" DIAMETER MOUNTING POLE
11. WEIGHT APPROXIMATELY 130 LBS
12. MOUNTS TO STANDARD 4.5" 0.D. POLE (NOT INCLUDED) WITH 3 SUPPLIED U-BOLTS SHOWN
13. CONFIGURATION SHOWN CONTAINS MOUNTING HOLES THAT DIRECTLY INTERFACE WITH 6' DIAMETER COMSCOPE ANTENNA PART NUMBERS UHX6-59W-P3A/B AND VHLPX6-6W-6WH/A. ADAPTER MAY BE REQUIRED TO INTERFACE WITH OTHER MAKES AND MODELS
14. A MINIMUM OF 1 STRUT ON EITHER SIDE OF THE MOUNTING POLE MUST BE INSTALLED (NOT INCLUDED) TO PREVENT POSITIONER FROM TWISTING ON MOUNT FROM WIND. ENSURE THAT THE STRUTS ARE INSTALLED SUCH THAT THE ANGLE THAT ARE MOUNTED AT DOES NOT EXCEED THE ANGLE SHOWN
15. ENSURE POWER CABLE +48VDC AND GROUND CORRESPOND WITH INPUT CONNECTOR PER DETAIL E, SHEET 3. L1, L2, L3, AND L4 INTERFACE WITH CORRESPONDING LINEAR ACTUATORS (CABLES AND CONNECTORS NOT SHOWN)
16. APPLY LOCTITE THREADLOCKER RED 271 TO THREADS OF INDICATED FASTENERS
17. TORQUE INDICATED 1/2-13 FASTENERS TO 40 FT-LBS
18. DO NOT LIFT FROM LINEAR ACTUATORS. ENSURE ALL LIFTING STRAPS ARE CLEAR OF MATING CONNECTORS AS TO NOT DAMAGE THE POSITIONER
19. CENTER OF GRAVITY 0.3" (0.8 cm) IN THE Y-DIRECTION AND 0" IN THE X-DIRECTION MEASURED FROM THE HORIZONTAL CENTER OF THE POSITIONER. CENTER OF GRAVITY 11.0" (27.9 cm) IN THE Z-DIRECTION MEASURED FROM THE CENTER OF THE 4.5" DIAMETER MOUNTING POLE.

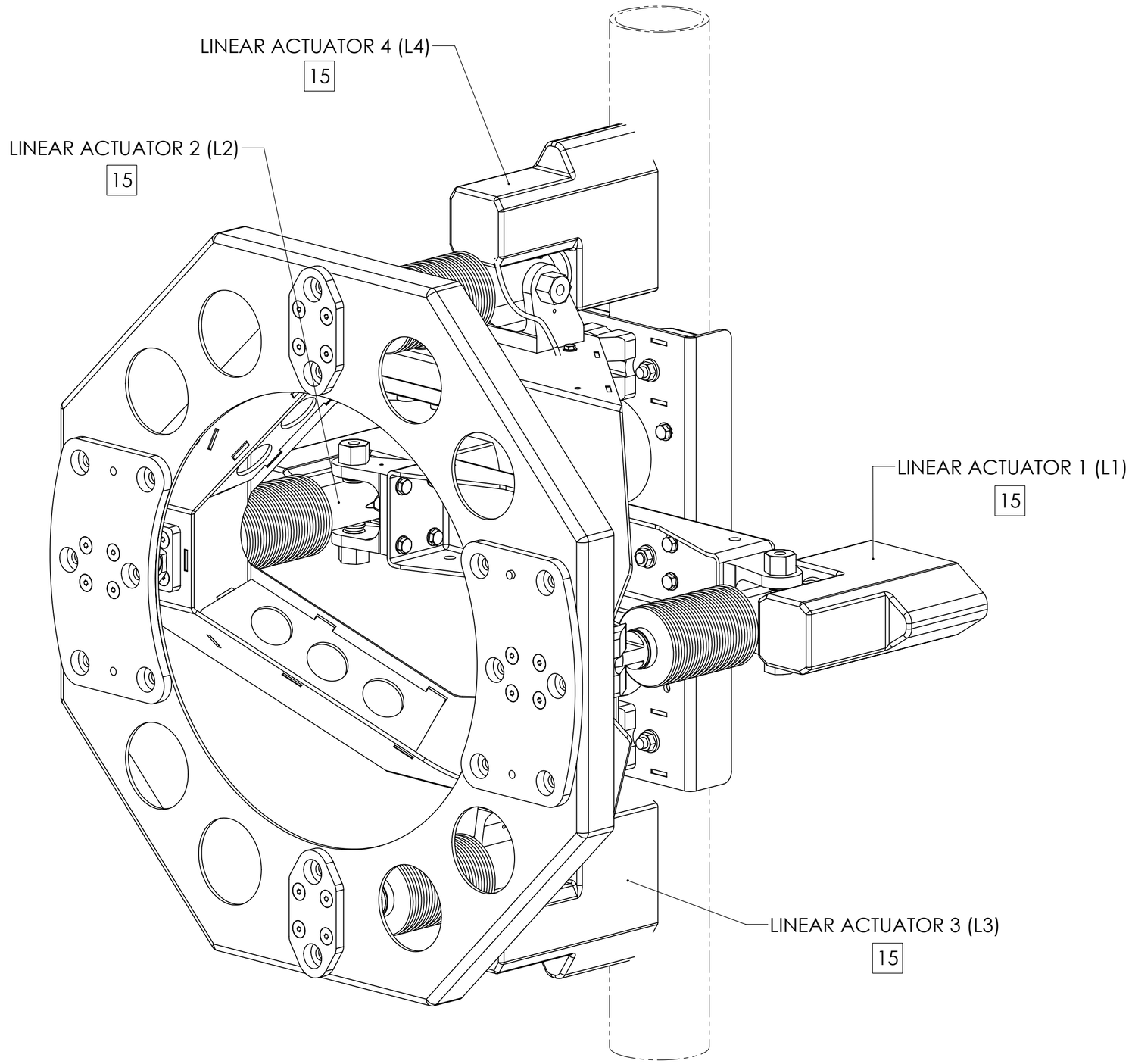


TABLE I

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

LA-15LPT - 40 - ____ - 100 - 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

POWER CABLE STANDARD LENGTHS (CONNECTOR BY FLYING LEAD)
- 050 = 50 ft
- 100 = 100 ft
- 150 = 150 ft
- 200 = 200 ft
- XXX = Custom length in feet

CUSTOM CONFIGURATION
- = Standard options - leave blank

MOTOR DRIVES AND PAYLOAD
- 40 = Az 500 ft-lbs @ 0.5°/s, El 500 ft-lbs @ 0.5°/s, 300 lb payload. Typically paired with 4-6 ft antenna

MODEL
- LA-15LPT = LinkAlign-15LPT (+/-7.5° azimuth, +/-7.5° elevation)

SYMBOL KEY
NOTE PL ITEMS

QPAR ANTENNAS USA, LLC
LAS VEGAS, NV 89121
www.qparusa.com

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

THIRD ANGLE PROJECTION
DO NOT SCALE DRAWING

DRAWN	S. CHEYNE	2013-10-28
CHECKED	C. CHEYNE	2017-05-09
ME APPR.	S. CHEYNE	2013-10-28
EE APPR.		2013-10-28

PART NO.
SEE TABLE I

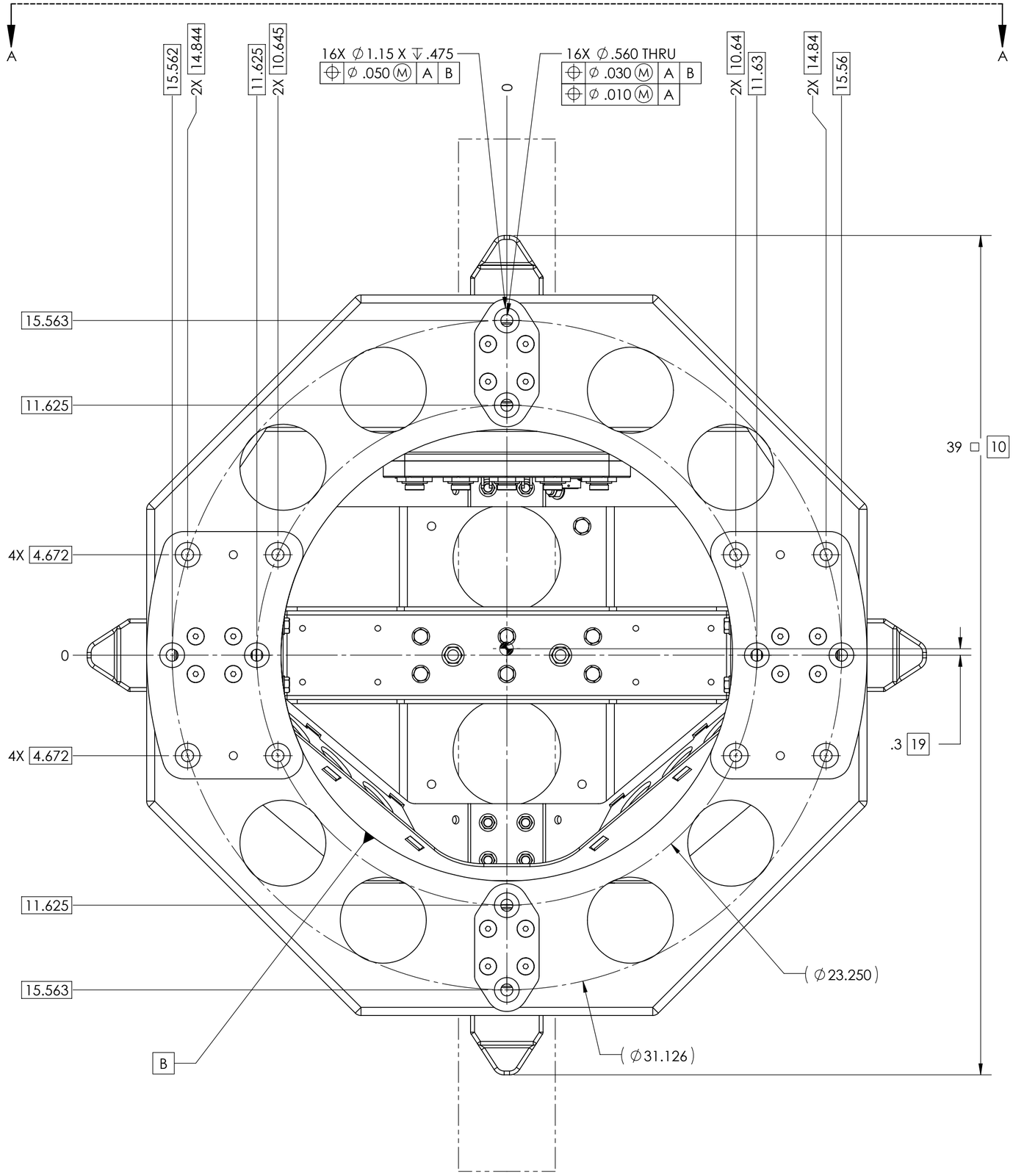
QPAR Antennas USA, LLC

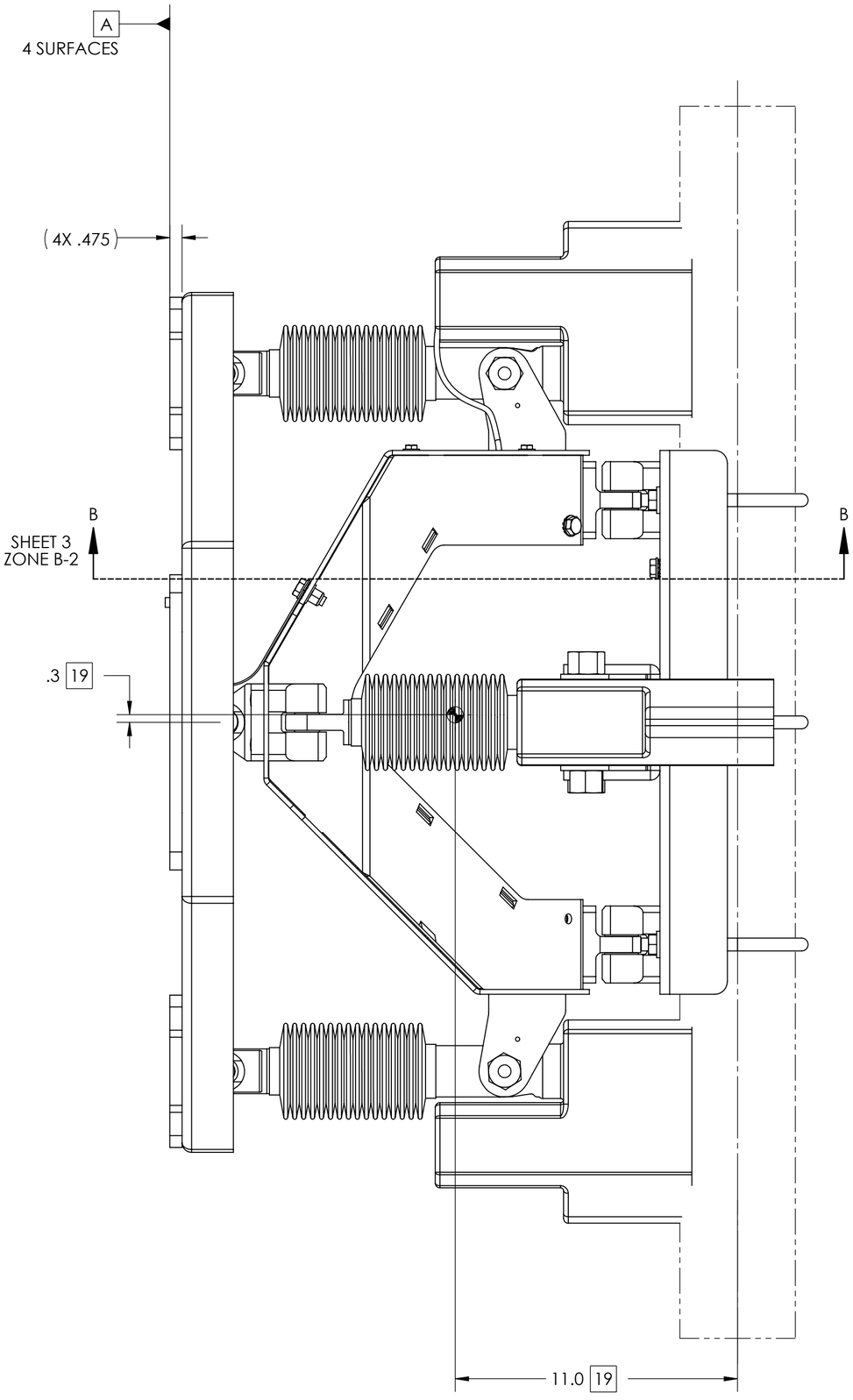
TITLE:
QLA-15LPT-40
INTERFACE CONTROL
DRAWING

SIZE	DWG. NO.	REV
C	ICDN900212	C

SCALE: 1:4 SHEET 1 OF 5

SHEET 3
ZONE B-6

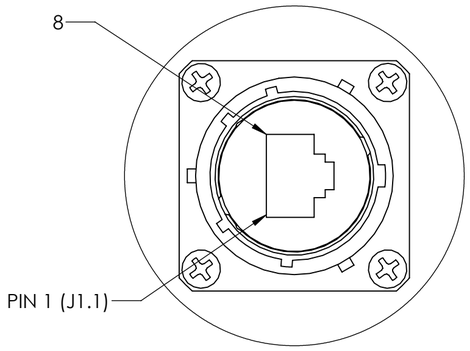




ANTENNA MOUNTING FEATURES

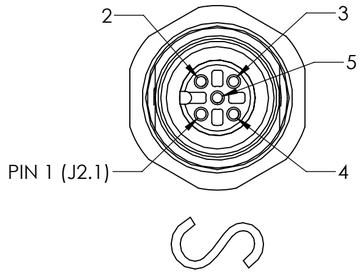
13

SIZE	DWG. NO.
C	ICDN900212
SCALE: 1:4	SHEET 2 OF 5



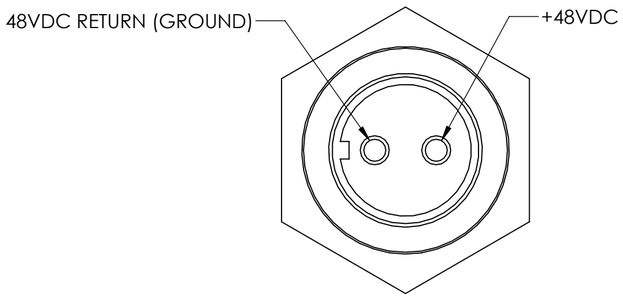
J1 CONNECTOR SHOWN FROM MATING SIDE
MATES WITH AMPHENOL P/N - RJF6B

DETAIL C
SCALE 1.5 : 1
SEE TABLE II FOR PINOUT DETAILS



J2 CONNECTOR SHOWN FROM MATING SIDE
MATES WITH TURCK P/N - 8151-0/PG9

DETAIL D
SCALE 2 : 1
SEE TABLE III FOR PINOUT DETAILS



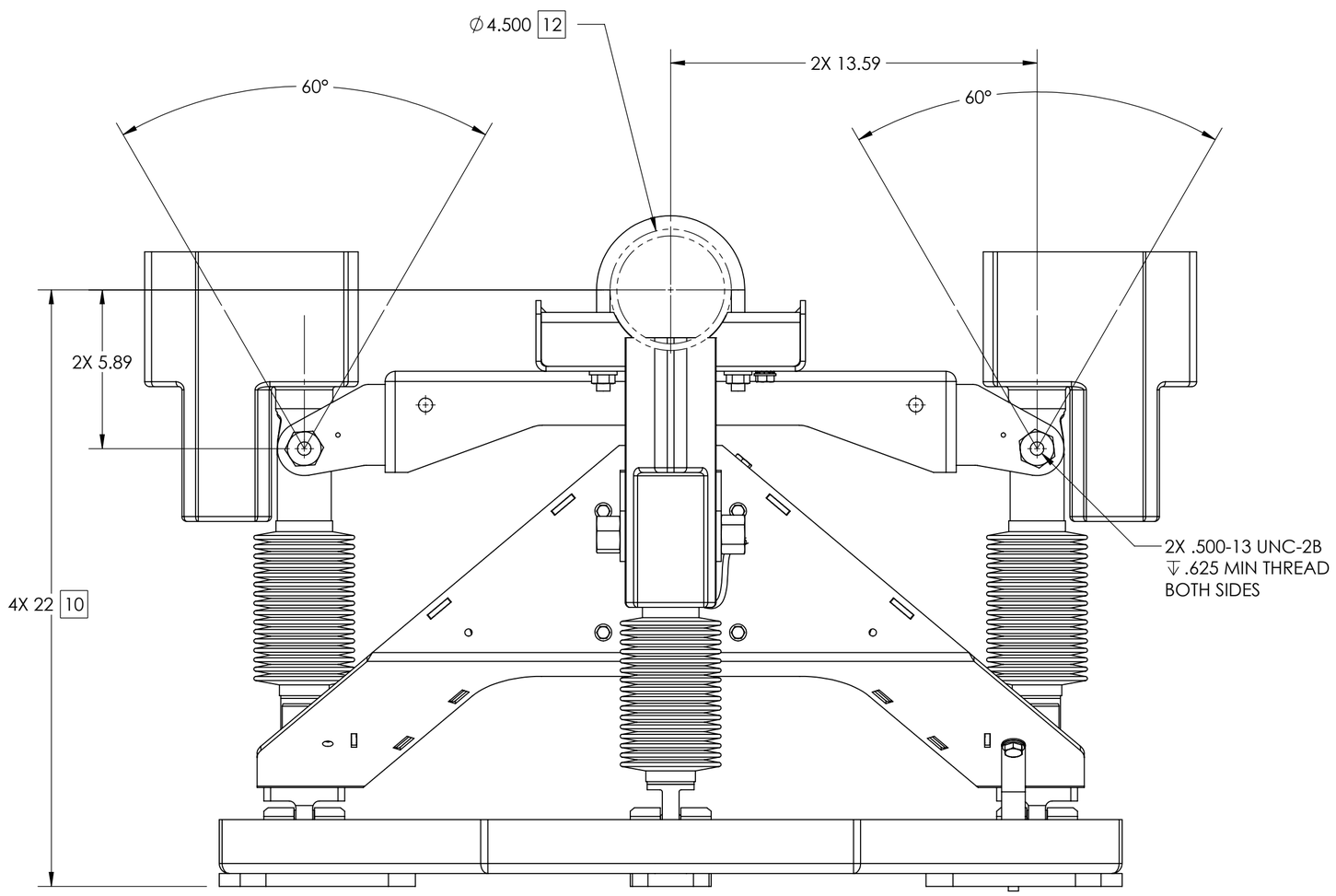
J3 CONNECTOR SHOWN FROM MATING SIDE
MATES WITH TURCK CABLE P/N - RKM 20-*M
(* INDICATES LENGTH IN METERS)

DETAIL E
SCALE 1.5 : 1
POWER INPUT

15

TABLE II (PoE CONNECTOR)	
CONNECTOR DESIGNATION	**FUNCTION**
J1.1	DATA PAIR 1
J1.2	DATA PAIR 1
J1.3	DATA PAIR 2
J1.4	+48-56VDC PoE POWER INPUT
J1.5	+48-56VDC PoE POWER INPUT
J1.6	DATA PAIR 2
J1.7	DC RETURN FOR PoE INPUT
J1.8	DC RETURN FOR PoE INPUT

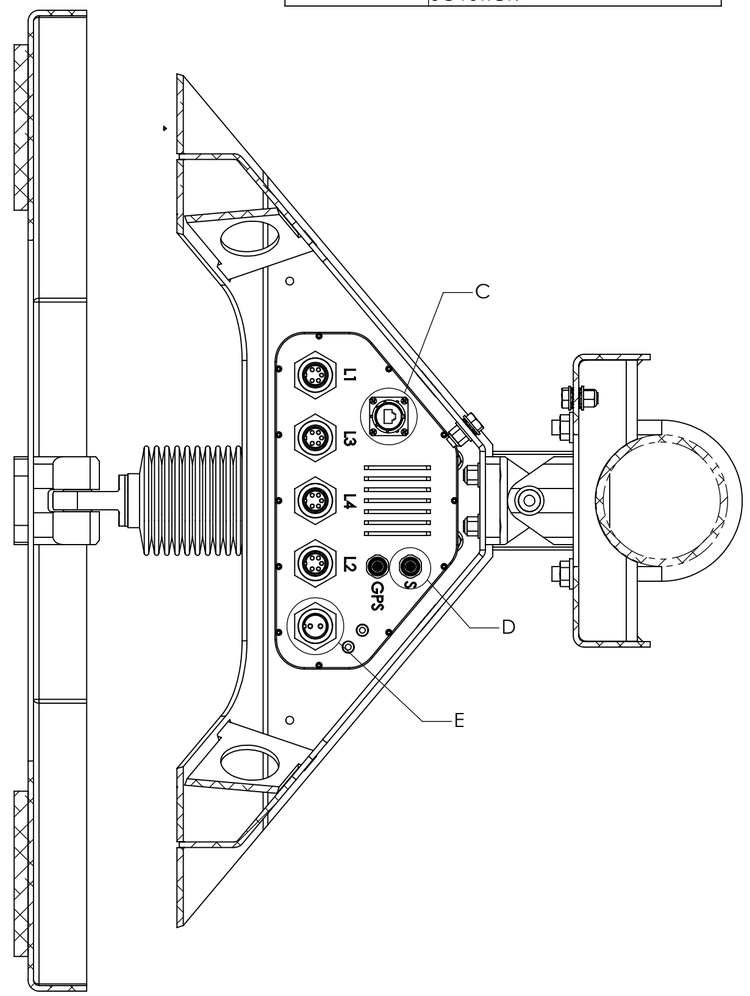
TABLE III (SERIAL CONNECTOR)	
CONNECTOR DESIGNATION	**FUNCTION**
J2.1	DC RETURN FOR QPARUSA JOYSTICK
J2.2	NOT USED
J2.3	(B) TxD-/RxD- DATA LINE
J2.4	(A) TxD+/RxD+ DATA LINE
J2.5	DC POWER FOR QPARUSA JOYSTICK



VIEW A-A
SHEET 2
ZONE F-6

STRUT INSTALLATION

14



SECTION B-B
SHEET 2
ZONE D-4

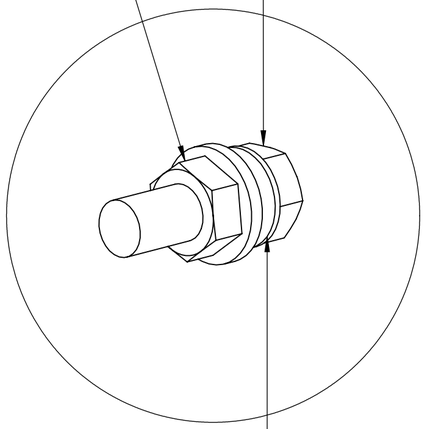
MATING CONNECTORS

15

SIZE	DWG. NO.
C	ICDN900212
SCALE: 1:4	SHEET 3 OF 5

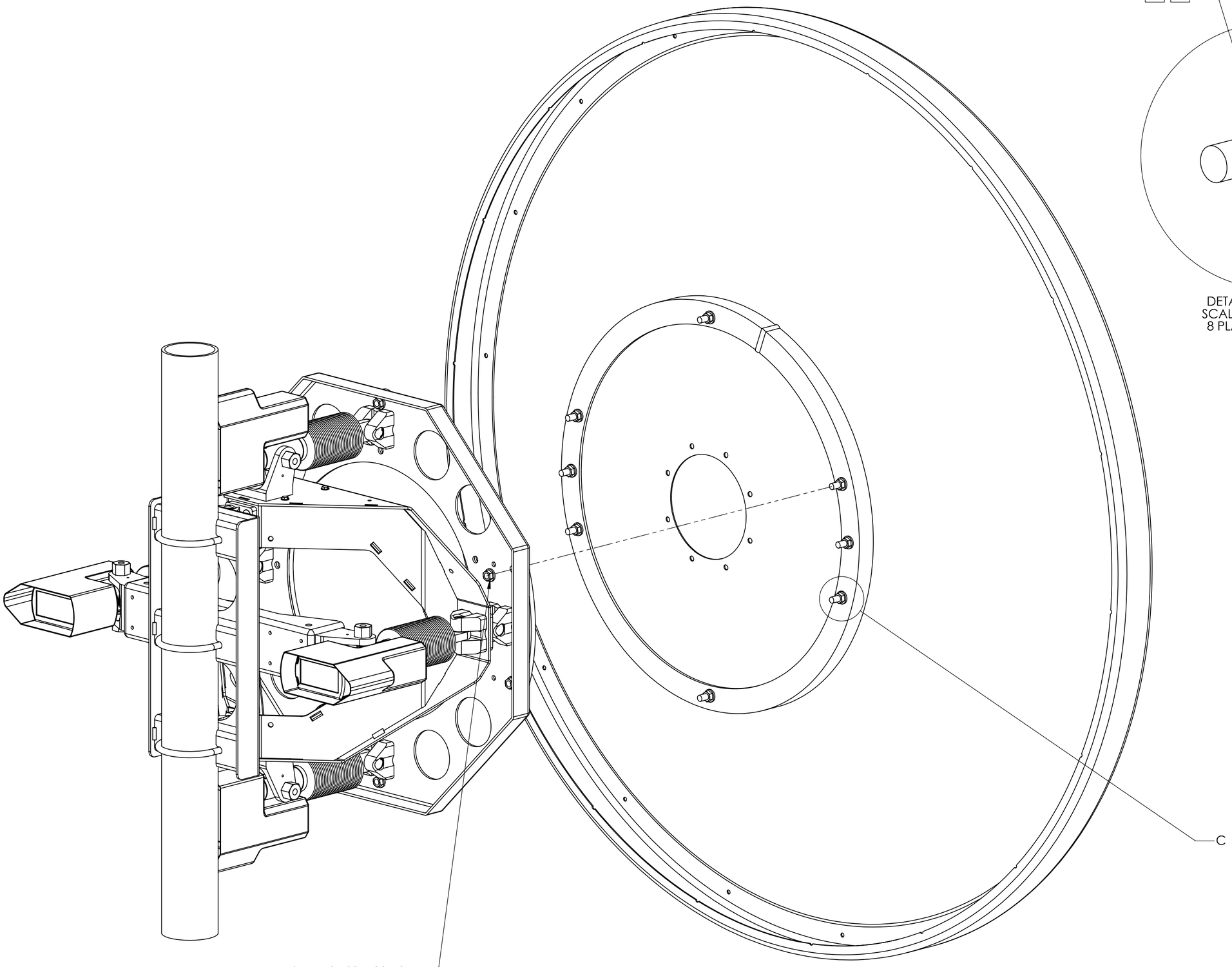
P/N - N-SF-SS-.500-13-1
NUT, SERRATED FLANGE, STAINLESS STEEL, 1/2-13
8 PLACES
16 17

P/N - S-ST-C-HH-.500-13 X 1.500-1
SCREW, STANDARD, CAP, HEX HEAD, STAINLESS STEEL, 1/2-13 X 1.500 LONG
8 PLACES
16 17



DETAIL C
SCALE 1 : 1
8 PLACES

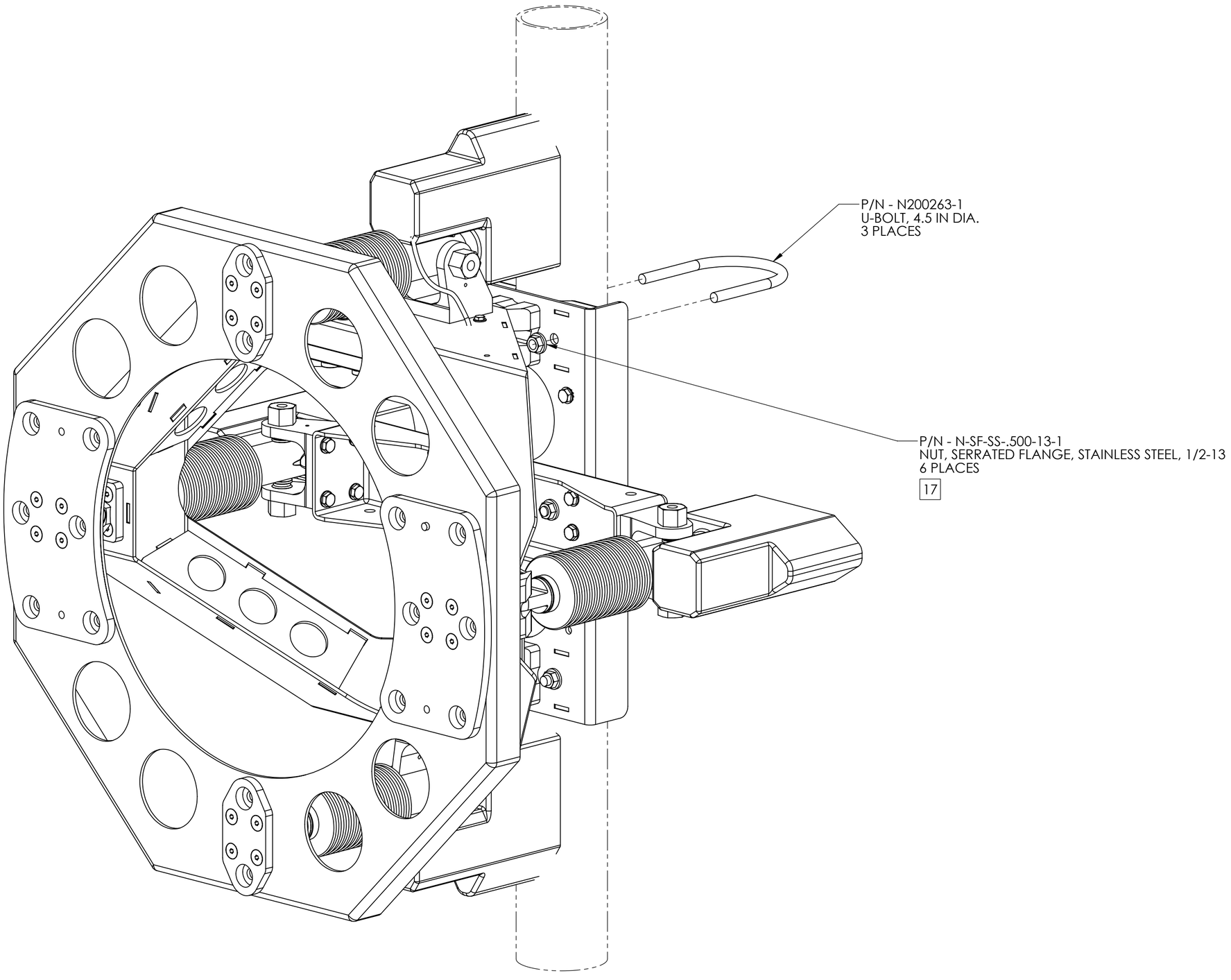
P/N - W-FL-SS-.500-.510-.880-.060-1
WASHER, FLAT, STAINLESS STEEL, 1/2,
.510 ID, .880 OD, .060 THICK
8 PLACES



P/N - N-SF-SS-.500-13-1
NUT, SERRATED FLANGE, STAINLESS STEEL, 1/2-13
8 PLACES
17

ANTENNA MOUNTING EXPLODED VIEW

SIZE	DWG. NO.
C	ICDN900212
SCALE: 1:4	SHEET 4 OF 5



POSITIONER MOUNTING EXPLODED VIEW

SIZE	DWG. NO.
C	ICDN900212
SCALE: 1:4	SHEET 5 OF 5