

REV	DESCRIPTION	DATE	APPROVED
B	2018-08-06	CN600564	CLC

NOTES: UNLESS OTHERWISE SPECIFIED

1. QPAR LINKALIGN-360FERP-20 CONFIGURABLE OPTIONS PER TABLE I. PART NUMBER GLA-360FERP-20-100 SHOWN THROUGHOUT THIS DRAWING. PoE CABLE SHOWN NOT TO SCALE
2. USE INTERFACE CONTROL DRAWING IN CONJUNCTION WITH DATASHEET N500127
3. 48 - 56VDC POWER SUPPLY INCLUDED WITH POSITIONER. NOT SHOWN IN DRAWING
4. HARD COAT ANODIZE ALUMINUM CONSTRUCTION WITH STAINLESS STEEL HARDWARE
5. 400° (+/-200°) AZIMUTH TRAVEL WITH 2.2°/SEC DRIVE RATE (NO LOAD)
6. 140° (+120°/-20°) ELEVATION TRAVEL WITH 2.2°/SEC DRIVE RATE (NO LOAD)
7. 400° (+/-200°) POLARIZATION TRAVEL WITH 6°/SEC DRIVE RATE (NO 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. 0.1° FEEDBACK RESOLUTION IN ALL AXES
10. AZIMUTH BACKLASH LESS THAN .15°. ELEVATION BACKLASH LESS THAN .15°. POLARIZATION BACKLASH LESS THAN 2°
11. 13.83" (35.1 cm) HIGH X 8.24" (20.9 cm) WIDE X 12.88" (32.7 cm) DEEP. DIMENSIONS APPLY WHEN POSITIONER IS AT 0° AZIMUTH AND 0° ELEVATION ANGLES
12. WEIGHT APPROXIMATELY 28.0 LBS (12.7 kg) NOT INCLUDING PoE CABLE
13. PAYLOAD SHALL NOT EXCEED 65 LBS OR 60 FT-LBS OF TORQUE ABOUT THE ELEVATION AXIS. TO CALCULATE TORQUE, TAKE THE DISTANCE FROM THE PAYLOAD CENTER OF GRAVITY TO DATUM -H- IN FEET AND MULTIPLY BY THE PAYLOAD WEIGHT. SEVERAL ANTENNA BRACKET OPTIONS AVAILABLE THAT INTERFACE DIRECTLY WITH FEATURES SHOWN. GO TO www.qparusa.com TO LEARN MORE
14. RADIO OR AUXILIARY MOUNTING HOLES. 30 LBS MAX.
15. CENTER OF GRAVITY 0.1" (0.25 cm) IN THE X-DIRECTION, 7.1" (18.0 cm) IN THE Y-DIRECTION AND 0.1" (0.25 cm) IN THE Z-DIRECTION. X & Z MEASURED FROM THE CENTER OF THE 2.00" DIAMETER MOUNTING POLE
16. FOR PERMANENT INSTALLATIONS, IT IS RECOMMENDED THAT THE (2) INDICATED 5/16-18 THREADED KNOBS BE REPLACED WITH (2) 5/16-18 X 1.000" LONG STAINLESS STEEL HEX HEAD FASTENERS. HARDWARE PROVIDED WITH UNIT. TORQUE TO 132 IN-LBS
17. POSITIONER IS AT AZIMUTH PEDESTAL 0° WHEN INDICATED FASTENER IS AT POSITION SHOWN WITH CLAMPING KNOBS IN THE BACK AS SHOWN
18. POSITIONER CLAMPS TO STANDARD 2" OUTSIDE DIAMETER MAST (NOT INCLUDED). OPTIONAL MIDMOUNT KIT AVAILABLE TO ADAPT TO MAST DIAMETERS UP TO 6". GO TO www.qparusa.com TO LEARN MORE
19. 5/16" QUICK RELEASE PIN TO SECURE POSITIONER TO MAST AND PREVENT ROTATION
20. POLARIZATION PAYLOAD SHALL NOT EXCEED 5 FT-LBS OF TORQUE ABOUT THE POLARIZATION AXIS. TO CALCULATE TORQUE, TAKE THE DISTANCE FROM THE PAYLOAD CENTER OF GRAVITY TO DATUM -B- IN FEET AND MULTIPLY BY THE PAYLOAD WEIGHT

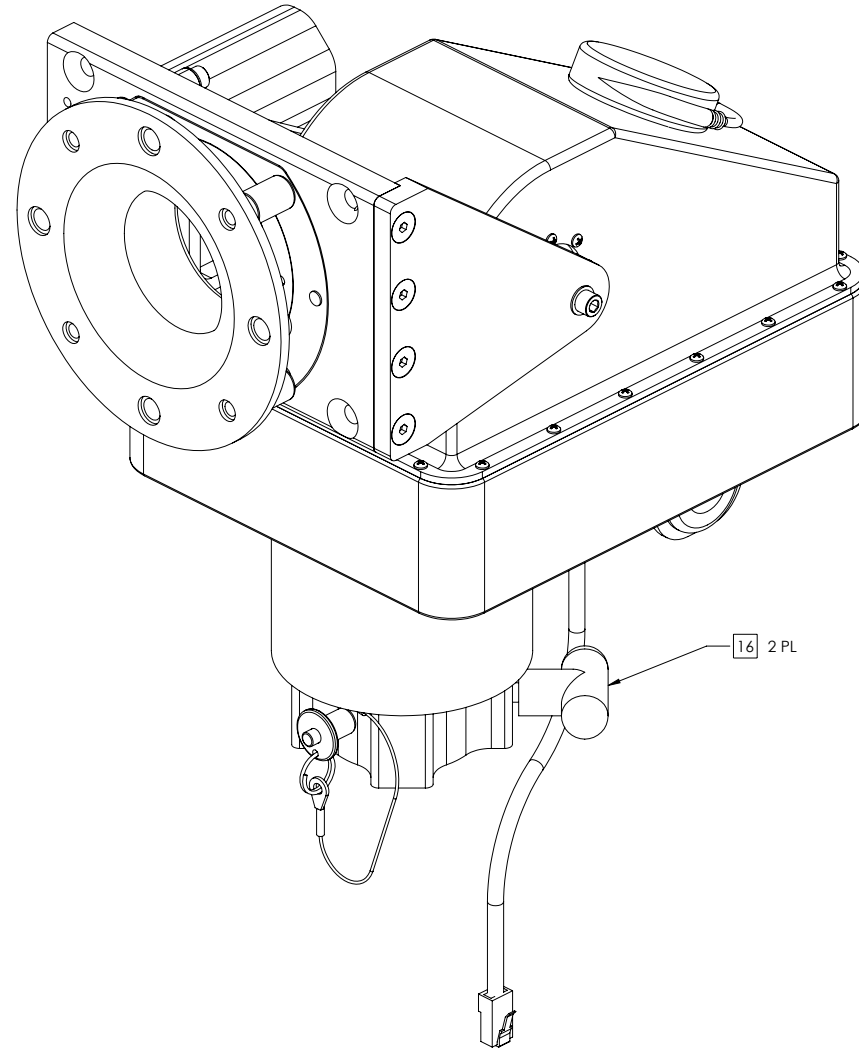
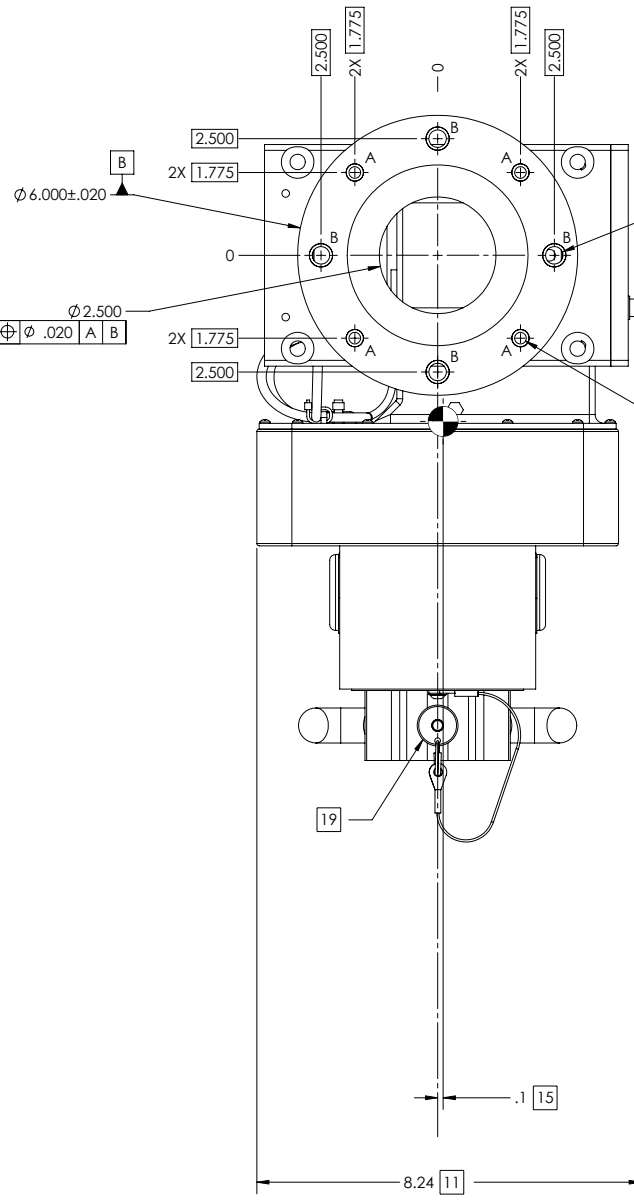


TABLE I	
BUILDING A PART NUMBER	STANDARD OPTIONS
LA-360FERP - 20 - - 100	<<EXAMPLE
	SHIELDED ETHERNET CABLE STANDARD LENGTHS
	050 = 50 ft
	100 = 100 ft
	150 = 150 ft
	200 = 200 ft
	250 = 250 ft
	300 = 300 ft
	XXX = Custom length in feet
	XXXX = Add "C" to end of cable length for unterminated mating connector
	CUSTOM CONFIGURATION
	= Standard options - leave blank
	MOTOR DRIVES AND PAYLOAD
	20 = Az 60 ft-lbs @ 2.2°/s, El 60 ft-lbs @ 2.2°/s, Pol 5 ft-lbs @ 6°/s, 65 lb payload. Typically paired with 2-3 ft antenna
	MODEL
	LA-360FERP = LinkAlign-360FERP (+/-200° azimuth, +120/-20° elevation, +/-200° polarization)

SYMBOL KEY		UNLESS OTHERWISE SPECIFIED:		DRAWN		S. CHEYNE		2016-01-14	
□	NOTE	○	PL ITEMS	CHECKED	C. CHEYNE	2018-08-06		QPAR ANTENNAS USA, LLC	
PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF QPARUSA. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF QPAR ANTENNAS USA IS PROHIBITED.		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		ME APPR.	S. CHEYNE	2016-01-14		TITLE:	
QPAR ANTENNAS USA, LLC San Diego, CA 92020 www.qparusa.com		THIRD ANGLE PROJECTION DO NOT SCALE DRAWING		PART NO.		SEE TABLE I		QPAR LINKALIGN-360FERP-20 INTERFACE CONTROL DRAWING	
				SIZE		DWG. NO.		REV	
				C		ICDN900357		B	
				SCALE: 2:3				SHEET 1 OF 3	

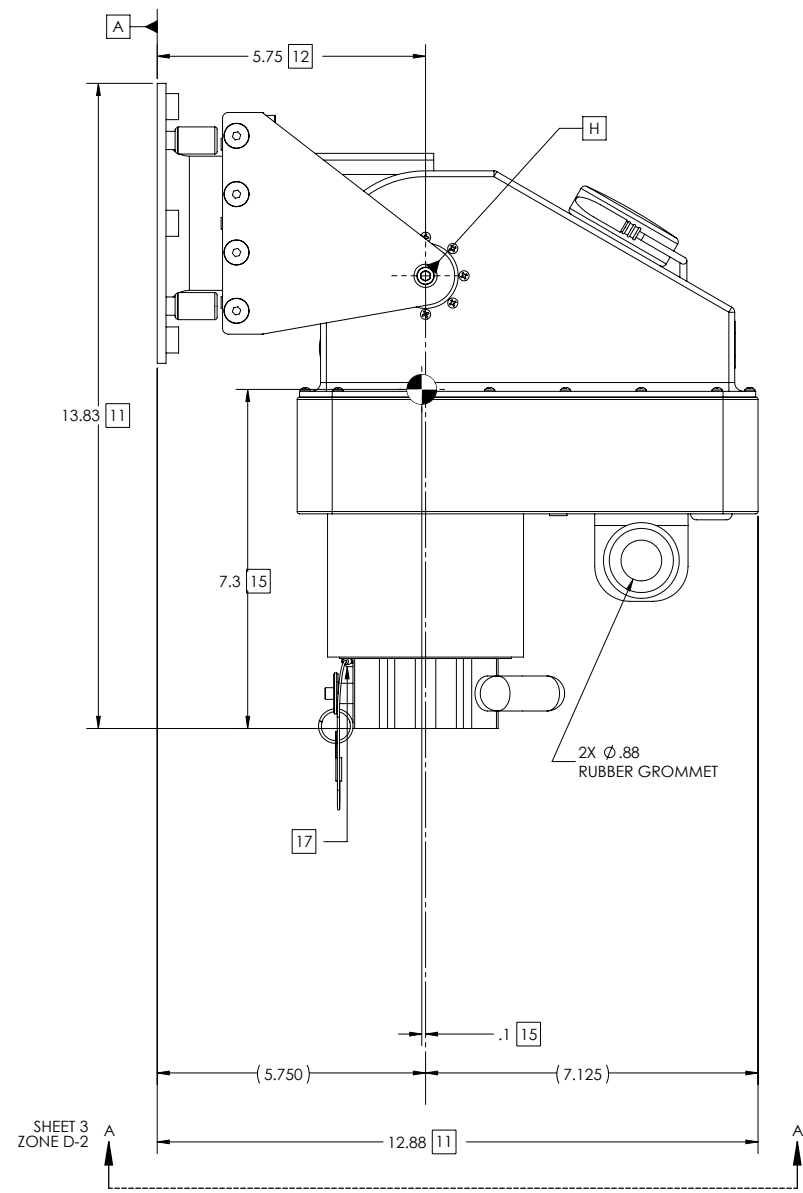


ANTENNA MOUNTING FEATURES

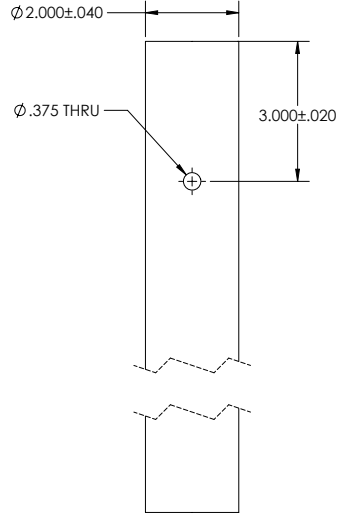
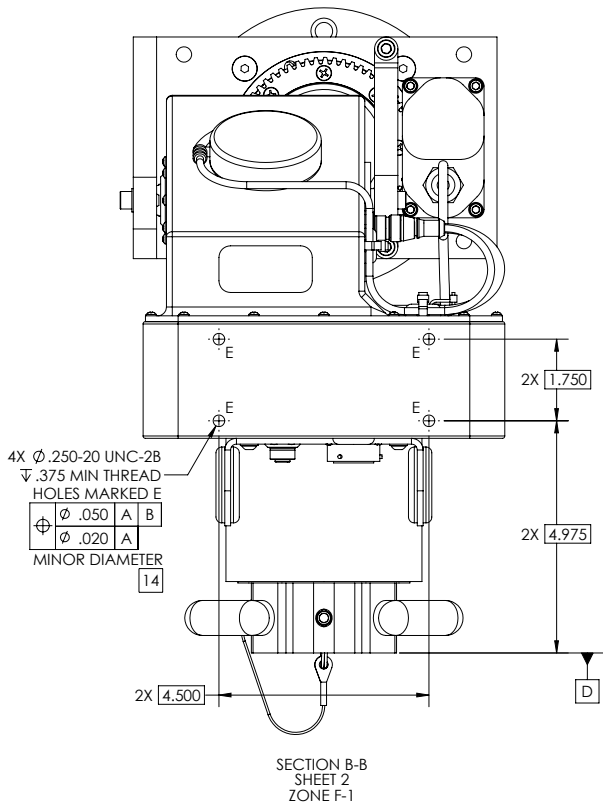
13

4X .375-16 UNC-2B
CAPTIVE NUTS INSTALLED
FROM FAR SIDE
HOLES MARKED B
 $\phi .020$ A B
MINOR DIAMETER

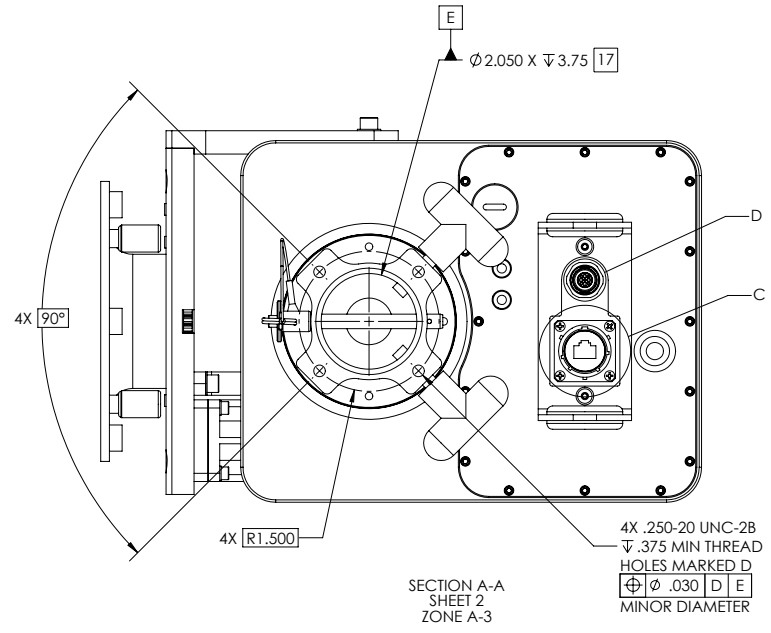
4X .250-20 UNC-2B
CAPTIVE THUMB NUTS
 $\nabla .500 - \nabla .750$ THREAD DEPTH
HOLES MARKED A
 $\phi .020$ A B
MINOR DIAMETER



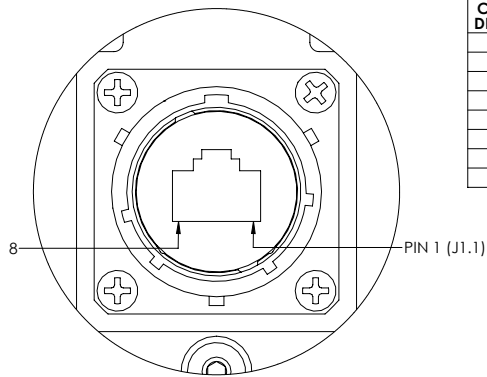
SHEET 3
ZONE D-2



18



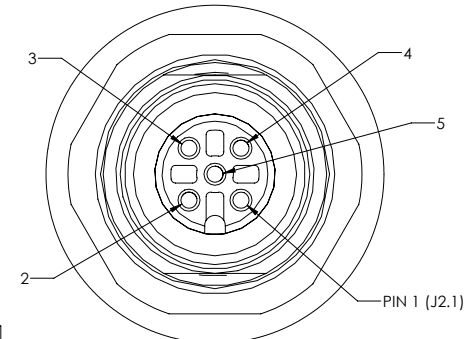
INTERCONNECT FOR POSITIONER PoE



DETAIL C
SCALE 2 : 1
SEE TABLE II FOR PINOUT DETAILS

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

INTERCONNECT FOR SERIAL INTERFACE



DETAIL D
SCALE 4 : 1
SEE TABLE III FOR PINOUT DETAILS

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