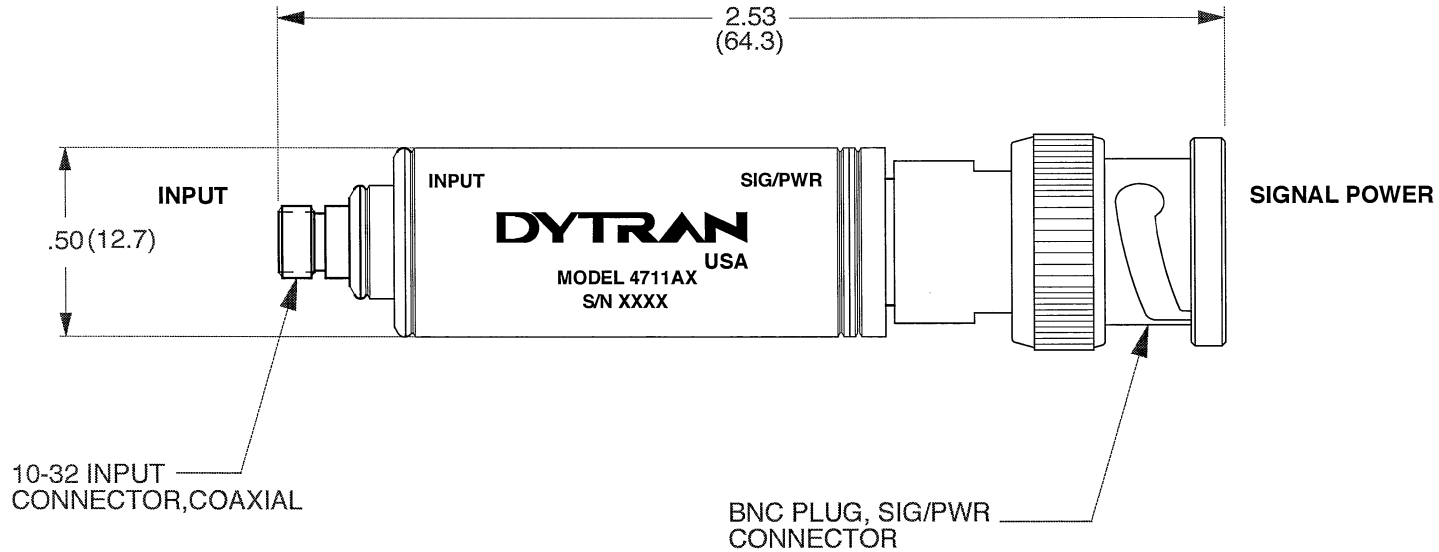


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| REV | ECN | DESCRIPTION | BY/DATE | CHK | APPR |
|-----|------|-----------------|-------------|-----------|------------|
| A | 7641 | INITIAL RELEASE | JS 07/12/11 | <i>JS</i> | <i>AWS</i> |



| | |
|-------------------------------|-----------|
| USED ON | NEXT ASSY |
| APPLICATION | |
| THIRD ANGLE PROJECTION USA | |
| | |

UNLESS OTHERWISE SPECIFIED:
 INTERPRET DIM & TOL PER ASME
 Y14.5M-1994. REMOVE BURRS
 COUNTERSINKS INTERNAL THDS 90°
 TO MAJOR DIA. CHAM EXT THDS 45°
 DEPTHS ARE FOR THDS PER MIL-S-
 7742.
 DIMENSIONS APPLY AFTER
 FINISHING.

ALL MACHINED SURFACES
 TOTAL RUNOUT WITHIN .005 BREAK
 SHARP EDGES .005 TO .010 MACHINE
 FILLET RADI .005 TO .015. WELDING
 SYMBOLS PER AWS A2.4
 ABBREVIATIONS PER MIL-STD-12

| | | |
|---|------------|--------|
| CONTRACT NO | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DIMENSION IN BRACKETS [] ARE IN MILLIMETERS. TOLERANCES ARE: | | |
| INCHES | METRIC | ANGLES |
| .XX ± .03 | .X ± 0.8 | ± 1° |
| .XXX ± .010 | .XX ± 0.25 | |
| FINISH | | |
| DO NOT SCALE DRAWING | | |

| | | | | | |
|---|---------|------------------------------|--------------|-----------------|-----|
| | | MASTER ONLY IF IN RED | | CHATSWORTH, CA. | |
| SCALE | DESIGN | DATE | | | |
| 2X | NC | 06/30/11 | | | |
| DRAWN | DATE | PART NO. | | | |
| NC | - | - | | | |
| CHECKED | DATE | MAT'L | | | REV |
| <i>JS</i> | 7/18/11 | - | | | A |
| APPROVED | DATE | NEXT ASSEMBLY | | USED ON | |
| <i>AWS</i> | 7/19/11 | - | | | |
| TITLE | | | DWG NO. | | |
| OUTLINE/INSTALLATION DRAWING, IN-LINE CHARGE AMPLIFIER MODEL 4711A | | | 127-4711A | | |
| | | | SHEET 1 OF 1 | | |

| | | |
|-------------------------------|---------------------------------------|------------------------------|
| MODEL NUMBER 4711A3 | PERFORMANCE SPECIFICATION | DOC NO PS4711A3 |
| | IEPE Charge Amplifier, In-line | REV B, ECN 10470, 10/18/2013 |



- MINATURE
- ERGONOMICAL PACKAGE

PHYSICAL

| | | ENGLISH | | SI | |
|------------------|-----------|---------------|----|---------------|-------|
| Weight | | 1.155 | oz | 33 | grams |
| Input Connector | Type | 10-32 Jack | | 10-32 Jack | |
| | Material | 304L | | 304L | |
| Output Connector | Type | BNC Plug | | BNC Plug | |
| | Material | 304L | | 304L | |
| Housing | Material | 304L | | 304L | |
| | Isolation | Case Grounded | | Case Grounded | |

PERFORMANCE

| | | | | | |
|-------------------------------|--|---------|-------|---------|-------|
| Sensitivity, ±5% | | 10 | mV/pC | 10 | mV/pC |
| Input Range | | 500 | pC | 500 | pC |
| Low Frequency Range, -3db/-5% | | .32/.96 | Hz | .32/.96 | Hz |
| High Frequency Response | | [1] | | [1] | |
| Linearity [2] | | 1 | %F.S. | 1 | %F.S. |
| Noise floor | | 3 | µVrms | 3 | µVrms |

ELECTRICAL

| | | | | | |
|---|--|------------|-----|------------|-----|
| Supply Current Range [3] | | 2 to 20 | mA | 2 to 20 | mA |
| Compliance Voltage Range | | +18 to +30 | VDC | +18 to +30 | VDC |
| Output Impedance, Typ. | | 100 | Ω | 100 | Ω |
| Output Bias Voltage | | 10 to 12 | VDC | 10 to 12 | VDC |
| Discharge Time Constant | | 0.5 to 1.0 | sec | 0.5 to 1.0 | sec |
| Minimal Insulation Resistance of Sensor | | 200 | MΩ | 200 | MΩ |

ENVIRONMENTAL

| | | | | | |
|-----------------------|--|-------------|----|------------|----|
| Operating Temperature | | -50 to +185 | °F | -45 to +85 | °C |
| Seal | | Epoxy | | Epoxy | |

This family also includes:

| Model | Sensitivity (mV/pC) | Range (pC) | Resolution (µVrms) | Oper. Temp(°F) | TC |
|--------|---------------------|------------|--------------------|----------------|------------|
| 4711A1 | 0.1 | 50000 | 300 | -50 to +185 | 0.5 to 1.0 |
| 4711A2 | 1 | 5000 | 30 | -50 to +185 | 0.5 to 1.0 |

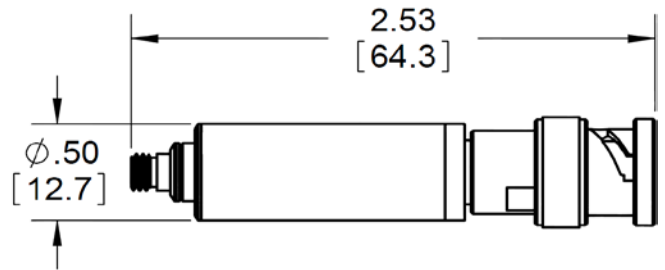
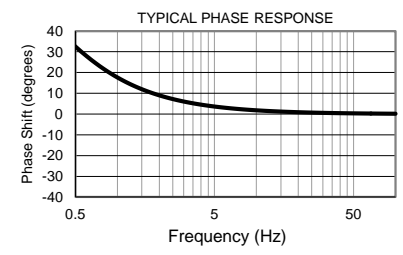
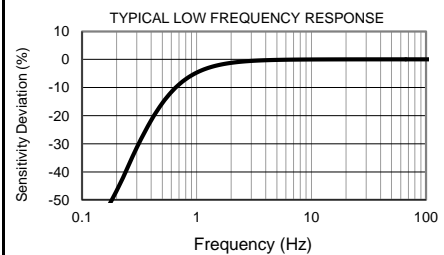
Refer to the performance specifications of the products in this family for detailed description.

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)

Notes:

- [1] Depends upon drive current and cable length.
- [2] Linearity is % of specified full scale (or any less full-scale range), zero-based best fit straight line method.
- [3] Do not apply power to this device without current limiting, 20mA Max, to do so will destroy the integral IC amplifier.
- [4] In the interest of constant product improvement, we reserve the right to change specifications without notice.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-4711A for more information.



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