TECHNICAL DATA

THE PS011 ARINC-429 TO RS-232 CONVERTER MODULE IS A 28VDC POWERED RUGGEDISED PROTOCOL CONVERTER MODULE, COMPRISING OF 1 ARINC-429 INPUT CHANNEL AND 1 RS-232 OUTPUT CHANNEL.

THE PS011 HAS THE OPTION FOR EITHER AN RS-422 OR USB INTERFACE AS AN ALTERNATIVE TO RS-232.

THE "XXX" PART NUMBER SUFFIX DEFINES THE CUSTOMER SPECIFIC CONFIGURATION OPTIONS, SUCH AS BAUD RATE, PROTOCOL AND INTERFACE TYPE.

GENERAL SPECIFICATION

POWER REQUIREMENTS: 28V POWERED (2W MAX)

WEIGHT: 0.350 kg MAX

TEMPERATURE:

OPERATING TEMPERATURE: -45 TO 70 DEGREES C

STORAGE TEMPERATURE: -55 TO 85 DEGREES C

PRODUCT SPECIFICATION

IP5011MKXXXX-PS-R1

INTERFACE CONTROL DOCUMENT (ICD)

IP5011MKXXXX-IDC-R1

SOFTWARE

SOFTWARE DEVELOPMENT IN ACCORDANCE WITH THE REQUIREMENTS OF DO-178 LEVEL E

COOLING

FREE AIR CONVECTION

PRODUCT REVISION IDENTIFICATION

THE PRODUCT FOR WHICH THIS DOCUMENT RELATES SHALL BE IDENTIFIED WITH THE MAJOR REVISION NUMBER ONLY.

FOR EXAMPLE

DOCUMENT REVISION 2.03 REFERS TO PRODUCT REVISION 2

MINOR REVISIONS ARE RESERVED FOR DOCUMENTATION UPDATES THAT DO NOT AFFECT FORM, FIT OR FUNCTION OF THE PRODUCT.

THIRD ANGLE PROJECTION TO B.S. 8888.

FOR GENERAL TOLERANCES & FINISHES SEE NONUYT STANDARD NC001.

MATERIAL:

PRINCIPALLY ALUMINIUM ALLOY

FINISH:

ALOCROM 1200

TOLERANCES

XXX 4/-0.75

XXX 4/-0.25

DATE 18.02.10

CHANGE 1

SHEET 1 OF 2

A2
### ELECTRICAL CONNECTIONS

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<tr>
<td>1</td>
<td>AEROCO POWER INPUT</td>
<td>+18 to +32 VDC (+28V NOMINAL)</td>
</tr>
<tr>
<td>2</td>
<td>OV POWER INPUT</td>
<td></td>
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<td>3</td>
<td>CHASSIS</td>
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<tr>
<td>4</td>
<td>ARINC-429 SPEED SELECT</td>
<td>ACTIVE LO</td>
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<td>5</td>
<td>ARINC-429 TX A</td>
<td></td>
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<td>6</td>
<td>ARINC-429 RX A</td>
<td></td>
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<tr>
<td>7</td>
<td>RS-232 TX OR RS-422 TX+</td>
<td>DUAL FUNCTION PIN (RS-232 OR RS-422)</td>
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<tr>
<td>8</td>
<td>RS-422 TX-</td>
<td>RS-422 OPTION ONLY</td>
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<tr>
<td>9</td>
<td>RS-232 RX OR RS-422 RX+</td>
<td>DUAL FUNCTION PIN (RS-232 OR RS-422)</td>
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<td>RS-422 RX-</td>
<td>RS-422 OPTION ONLY</td>
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<td>11</td>
<td>DIGITAL GROUND</td>
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<td>12</td>
<td>USB +5V</td>
<td>USB OPTION ONLY</td>
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<td>USB +5V</td>
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<td>USB -5V</td>
<td>USB OPTION ONLY</td>
</tr>
<tr>
<td>15</td>
<td>USB 5V</td>
<td>USB OPTION ONLY</td>
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**NOTES:**

428V DC power is supplied to the IP5011MXXX on pins 1 & 2 (2 AMP supply).

All installation wires should be screened and terminated to the connector backshell except for power input (pins 1 & 2).

**EFFECTIVITY**

ARINC-429 BUS SPEED SELECT (pin 4), link to OV DC (pin 2) for 12.5kHz operation, open circ. or link to 428V DC (pin 4) for 100kHz operation.

ARINC-429 INTERFACE is OPTO-Isolated and does not require a signal ground.

RS-232 signals (pins 7 & 9) referenced to digital ground (pin 11)

RS-422 signals (pins 7, 8, 9 & 10) referenced to digital ground (pin 11)

USB CABLE NOT TO EXCEED 5 METRES IN LENGTH.