



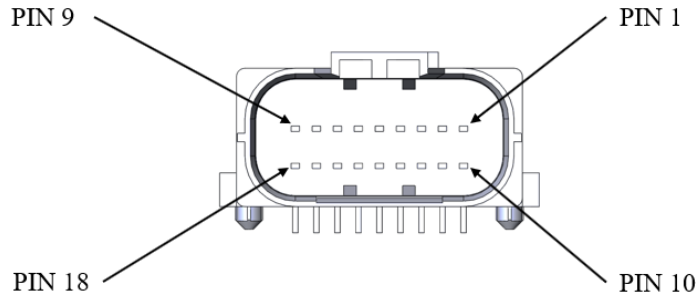
## **INS401 - Firmware Upgrade Instructions**

Application Note  
Revision 1.4



## Main Connector and Pin Description

The main connector carries all the other power and I/O signals to and from the INS401 module. This connector is also of automotive grade and is manufactured by JAE Electronics. The male end which is installed in the INS401 housing has part number MX23A18NF1; the female end, which is attached to the external wiring harness, has part number MX23A18SF1. Figure 1 illustrates the location of the 18 pins in the male part, as seen facing the connector from outside the module.



**Figure 1 Pin Diagram of the Male End**

Table 1 shows the functional description of the 18 pins in the main connector.

**Table 1. Pin Description of the Main Connector**

Pin Number	Type	Pin Name	Pin Function
1	Reserved	N/A	Reserved
2	Reserved	N/A	Reserved
3	I/O	ETH TRX N	Ethernet (negative)
4	I/O	ETH TRX P	Ethernet (positive)
5	Reserved	N/A	Reserved
6	Reserved	N/A	Reserved
7	Reserved	N/A	Reserved
8	Reserved	N/A	Reserved
9	Power	VCC IN	9V ~ 32V DC power input
10	Reserved	N/A	Reserved
11	Reserved	N/A	Reserved
12	Reserved	N/A	Reserved
13	Reserved	N/A	Reserved
14	Power	GND	Negative power supply input
15	Power	GND	Negative power supply input
16	O	PPS	1 Pulse per Second output, synchronized to GNSS
17	Power	GND	Negative power supply input
18	Power	GND	Negative power supply input