

ICE Platform Enclosure

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Please read [Limited Warranty](#) and [General Warnings and Cautions](#) prior to operating.

Description

The ICE Platform Enclosure contains the necessary [Master Control Board](#), communications ports, I/O, mounting hardware, and thermal management for supporting up to 8 daughter modules.



Absolute Maximum Ratings

Note: All modules designed to be operated in laboratory environment

Parameter	Rating
Environmental Temperature	>15°C and <30°C
Environmental Humidity	<60%
Environmental Dew Points	<15°C

Specifications

	ICE-MC1	Units
Input Power Requirements		
<html> </html> 5V line	>5	A
<html> </html> 15V line	>1.5	A
<html> </html> -15V line	>1.5	A
Maximum Power Consumption¹⁾		

	ICE-MC1	Units
Input Power Requirements		
<html> </html> 5V line	10	A
<html> </html> 15V line	3	A
<html> </html> -15V line	3	A
Slave Boards		
<html> </html> Max Number of Slave Boards	8	
Communication Methods		
<html> </html> USB 2.0		
<html> </html> TTL Serial (3.3V)		

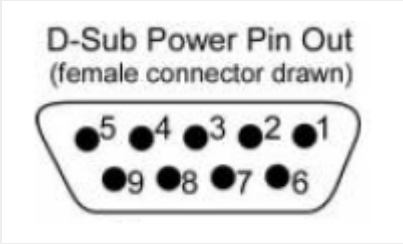
I/O

USB

USB communication to the ICE-MC1 is done via a type-B USB connector on board. The ICE-MC1 emulates a serial port over USB and all communications with the device should be done with Serial communication settings of '8N1' (8 bit, no parity, 1 stop bit) at 115,200 baud. The comm (or serial) port to use will be chosen by the USB host computer.

TTL Serial

3.3V TTL Serial is available on the back 9pin D-sub connector on the ICE-Box. The pin definition is shown below:



D-Sub Power Pin Out
(female connector drawn)

Pin	Signal
1	RESERVED
2	RXI_Serial
3	TXO_Serial
4	5V In ²⁾
5	Ground
6	RESERVED
7	No Connect
8	RESERVED
9	RESERVED

TXO is for an external device transmitting data out to the ICE-MC1. RXI is for the ICE-MC1 sending data that an external device receives.

¹⁾ External power provided to ICE-MC1 must also be able to handle the current requirements to utilize maximum power consumption specification

²⁾ leave unconnected if USB is also connected

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