Scenarios for powering the Sensor Puck

- Power the puck from the RS-232 or RS-485 xcvr lines.

Pros	Cons
Allow you to read sensor's power requirements from the PUCK before powering sensor.	Will make it difficult for external and internal sensor makers to integrate puck functionality into an existing sensor due to having to power internal processsors/logic from serial lines.
Could determine identity of sensor before applying power to the sensor.	Power draw required for relay / step-up voltage converters
Simple interface requiring only standard EIA-232 three wire interface.	Incompatible RS-232 transceiver current supply capabilities (i.e. does not meet spec.)
	Requires the ability to power down xcvrs to return the puck to 'puck mode'.
	Latching relay state complexity

- Supply a separate power line to power the puck.

Pros	Cons
Allow you to read sensor's power requirements from the PUCK before powering sensor.	Will make it difficult for external and internal sensor makers to integrate puck functionality into an existing sensor due to having to power internal processsors/logic from separate power line.
Could determine identity of sensor before applying power to the sensor.	Will require hardware redesign or use more DPA ports.
	May discourage other organizations from adopting MOOS mooring concepts due to the requirement to add additional power lines.
	Requires additional bulkhead penetrations

- Power the puck from instrument power.

Pros	Cons
Puck design is very simple.	Can not identify instrument if it throws a breaker, only the port and current trip level will be known.
External and internal sensor makers would only have to implement the puck commands and supply persistent storage to eliminate the need for a puck on their sensor.	
Simple interface requiring only standard EIA-232 three wire interface plus system power.	