Frequently Asked Questions

Question: What is a RAAD Box?

Answer: The RAAD Box is a **R**emote **A**ddressable **A**nalog to **D**igital converter junction box, which is used with conventional analog load cells. With the RAAD Box, conventional strain gauge load cell systems can be transformed into advanced sensor networks.

Question: How does the RAAD Box work?

Answer: The RAAD Box employs METTLER TOLEDO's exclusive technology to embed intelligence into standard conventional load cells, creating a network of individually addressable smart load cells.

Question: What are the benefits of creating a network of individually addressable smart load cells?

Answer: Instead of analyzing the combined signal from every load cell in the system, the RAAD Box embeds intelligence into each individual load cell, enabling you to analyze your system at the lowest level. Failures can be detected immediately, guarding you against costly downtime or product waste.

In addition, the RAAD Box enables you to address unique weighing applications that require control over each load cell loading point. It also enables you to upgrade competitive truck scales, and provide cell diagnostics on tank and hopper scales.

Question: What are the RAAD Box's physical dimensions and construction?

Answer: The unit is approximately 12.2 x 8.66 x 3.49 inches and is constructed of stainless steel.

Question: Is the RAAD Box certified for use in hazardous (reduced excitation) environments?

Answer: The RAAD box has been submitted to KEMA and Factory Mutual for reduced excitation certification. Certification is pending.

Question: How do I install a RAAD Box?

Answer: Installation instructions are provided with the RAAD Box. A copy follows this document.

Question: Can I use a RAAD Box with my existing analog load cells and wiring scheme?

Answer: Yes. A single RAAD Box will connect up to four 350 ohm 2mV/V or 3 mV/V analog load cells. The only additional wiring required is an interface cable coming from the RAAD Box to the terminal.

Question: Does the RAAD Box work with other scale terminals?

Answer: Yes. The RAAD Box can be used with the METTLER TOLEDO 8530, COUGAR®, JAGUAR® and JAGXTREME™ terminals.

Question: Are there any additional benefits of using the RAAD Box with the JAGXTREME terminal?

Answer: Yes. Advanced diagnostics are enabled that allow the JAGXTREME terminal to monitor and log the condition of the load cells during operation and report anomalies to the operator. In addition to the condition monitoring, the JAGXTREME/RAAD Box combination provides fault recognition and recovery operation, if this feature is enabled.

Question: How do I enable these features in the JAGXTREME terminal?

Answer: These features can be accessed in the Maintenance section of the JAGXTREME terminal.

Question: If I purchase a RAAD Box when I purchase a JAGXTREME terminal, am I entitled to any special discounts?

Answer: No special discounts are available at this time.

Question: How many RAAD Boxes can I connect together?

Answer: You can daisy chain six RAAD Boxes to one (1) JAGXTREME™, JAGUAR® or COUGAR® terminal An external power supply is required if more than three RAAD boxes are used with a single JAGXTREME terminal. The COUGAR terminal does not require an additional power supply.

Question: How do I connect RAAD Boxes together?

Answer: Each RAAD Box includes an additional terminal strip for connecting additional RAAD Boxes.

Question: When using a RAAD Box, if I have a load cell failure, can I plug in a new load cell with no configuration or address change? Do I have to recalibrate at this point?

Answer: There is no additional configuration or addressing required. Depending on the application, a calibration may or may not be required.

Question: How do I choose between 2mv and 3mv load cells with the RAAD Box?

Answer: The output is selectable with a jumper for each individual load cell.

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