



## Batch-690 IND690 Application Module

The Batch-690 Application Module adds advanced features to the capabilities of the IND690 terminal to automatically or manually control the batching sequences: fill, batch, and dose. This is accomplished through the addition of a hardware key that provides new setup parameters and sequences. Utilize the discrete I/O to control the individual valves, configure the timer, and configure the communication interface to have full remote control of the process.

| Feature                      | Customer Benefit   |
|------------------------------|--|
| Formula Memory               | <ul style="list-style-type: none"> <li>Recall up to 50 formulas comprised of up to 32 materials each</li> <li>Each formula has a unique number, name, list of materials, and options for automatically moving to the next material or stopping after each material (phase) and tare range tolerances</li> </ul>  |
| Material Memory              | Recall up to 999 materials each with a unique number (000-999), name, message, target weight, feed and fine feed values, and tolerances  |
| Messages                     | <ul style="list-style-type: none"> <li>Direct the user in a semi-automatic mode to perform an operation in-between dispense cycles utilizing a subset of the 200 stored messages</li> <li>Create messages up to 24 alphanumeric characters in length</li> </ul>  |
| Discrete I/O                 | <ul style="list-style-type: none"> <li>Agitate material(s) based upon a target value for x amount of time or until a weight limit is met</li> <li>Avoid overfilling by triggering the output to empty the container based upon the remaining value</li> <li>Refill the supply vessel by triggering the output signal when the weight falls below the fill target</li> <li>Send system status output from the terminal scales to a PLC or PC</li> <li>Operate more quickly by triggering the output to switch scales</li> </ul> |
| Totalization                 | <ul style="list-style-type: none"> <li>Totalization of gross wgt, item counter, std dev, mean, min/max value for all or 'good' formulas</li> <li>Item counter maximum: 9,999. Used to automate the process for x number of sequences</li> </ul>  |
| Automatic Safety Shutoff     | Avoid safety issues using the relay box which automatically shuts off all outputs if the IND690 communication is interrupted   |
| Monitoring Options           | <ul style="list-style-type: none"> <li>Pause the batch sequence if the flow is not within tolerance</li> <li>Continuously optimize the feed value to make corrections under varying conditions</li> <li>If a material is overfilled, the remaining materials are corrected to save the batch</li> <li>Stops the sequence in the event of a container leak or a clump of material is released</li> </ul>  |
| Tare Functions               | <ul style="list-style-type: none"> <li>Ensures the correct container has been placed on the scale by monitoring the tare range</li> <li>Save time by automatically taring at the beginning of a new batch sequence</li> </ul>  |
| Start and End Timers         | Use timers to pause between the fill of the next material in a formula   |
| Learn Mode                   | Automatically determine the feed and fast feed values for the quickest way to reach the target weight. Learn mode continues to adjust to make corrections under varying conditions   |
| Key Interlocks               | Lock the front keypad keys to avoid accidentally starting unwanted sequences   |
| Information transfer to a PC | Control and optimize your process while collecting the tare, current and stored target parameters of each material, the net total of the formula as well as the user defined data entered (Keys A-F)   |
| Batching Sequences           | Description  |
| Fill                         | Automatically or manually fill a container on scale to target. Removal of filled container handled by other equipment  |
| Batch                        | Automatically or manually fill a container to target with material 1, and then repeat for up to 32 materials in a formula  |
| Dose                         | Automatically or manually weigh-out to target into container on scale. Filling of supply vessel handled by other equipment   |

