

Electronic Preset Delivery System

Smith Meter™ AccuLoad® III

Bay Configuration

Issue/Rev. 0.0 (7/04) Bulletin AB06058

Overview

Note: This feature is only available when using AccuLoad III-X Revision 10.02 firmware or better.

The AccuLoad III supports bay transaction control. The customer can choose whether to track transactions and print reports for each individual load arm, or to track transactions and print a single report for all load arms on a bay. The AccuLoad III now supports the definition of up to two bays.

When a bay is defined, all the batches run on the load arms for that bay contribute to a single transaction; therefore, when a transaction is ended on one of the load arms, the transaction is ended for the entire bay. A transaction cannot be ended while flow is present on any of the load arms in the bay.

When a batch is started on any arm within a bay that is currently idle, that bay is now considered to have a transaction in progress. The driver may now start batches on other arms within that bay as long as the arm is authorized. The maximum number of batches allowed per bay transaction is ten.

The AccuLoad programmable driver prompts will only be displayed if the bay is currently idle; therefore, the prompts will only be displayed prior to the start of the first batch for the bay, whichever arm that might be.

All of the methods that ended a transaction prior to Revision 10.02 are still available (i.e., PRINT key, communications, digital input) for bays except the ticket printer. Pressing the PRINT key or sending the ET command on any arm within the bay that has a batch in progress will end the transaction on all arms on that bay, as long as there is no flow active on any arm. Once a transaction has been started on the bay, the PRINT key will be ignored if any arm within the bay has flow active. Batches must be stopped or completed on all arms. If an ET command is sent to an arm within a bay when one of the other arms still has flow active, the AccuLoad will return an "NO04- Flow Active" response.

A transaction start event will be logged for the bay and also for each arm used in the bay transaction.

Bay Transaction Archive

Transactions are no longer archived by load arm. When the AccuLoad is configured for bays, the transaction for the entire bay is archived. Delivered batches from any arm configured to the bay are archived with the bay transaction; therefore, the bay transaction can consist of batches from different load arms. The load arm number is added to the batch archive to identify the arm that delivered the batch. Batches are archived for the bay transaction according to the order they are started.

The following data is archived for each transaction:

- · Card data
- · Transaction start time
- Prompt responses
- Transaction number
- Batch totals
- Bay IV, GV, GST, GSV, and mass (transaction totals)
- Bay additive totals (up to 24 injectors)
- Total number of batches for bay
- Alarm log (20 alarms maximum)
- · Transaction end time
- Product non-resettables (6 arms × 6 products × 5 volume types).

Alarms

No more than 20 alarms are allowed for the bay. When the number of alarms on the bay exceeds 20 alarms, an arm alarm, Alarm Limit Exceeded, will be set on all load arms on the bay. This will cause the batches on all arms for that bay to be stopped, and the bay transaction must be ended.

Communications

Authorization is required for specific load arms rather than the bay. If a load arm is swung to the other bay while authorized, the arm retains its authorization. The host may restrict an arm to a specific bay by overriding the swing arm position using the MS command.

The host has the capability of determining the position of a load arm and overriding the current position of a load arm. The SW command is already available for the host to determine the side or bay to which a load arm is swung. The MS command allows the host to override the current position of the bay. If the host has overridden the current swing arm position, loading is not permitted on that arm until the load arm position matches the host override.

The host, therefore, may authorize the desired arms for the driver and then override the swing arm detect inputs to allow the arms to only be used on one of the bays.

When a transaction is started on any load arm in the bay, the transaction in progress status will be set for all load arms on the bay.

Since all load arms on the bay contribute to a single transaction, an "ET" sent to any one load arm on the bay, will end the transaction.

Bay transaction totals may be retrieved by addressing any of the arms assigned to the bay.

When the host requests data for the current batch (i.e. no batch number specified in command), the AccuLoad will return data for the current batch on the arm addressed. When the host requests data for a completed batch (i.e. command specifies the batch number), data will be returned for the desired batch regardless of arm addressed. The batches are numbered according to the order they are started regardless of arm.

A new communications command (BA-Bay Assignment) has been added which will return the current bay position of each arm. This can be useful when swing arms are used.

For more information about AccuLoad III communi-cations, consult the Communications Manual, MN06130L.

Program Parameters

Load Arm 109 - Bay Assignment

When using Firmware Revision 10.02 or higher, this program code allows the operator to assign a load arm to a specific bay. Available options are as follows:

- (0) Independent
- (1) Bay A
- (2) Bay B
- (3) Swing Arm

Help: Select if this arm is part of a bay.

Bay 107 - Bay ID

This entry allows the operator to enter or edit a 28-character bay identification. The ID is used on default reports and is available for configurable reports. The data entry will allow the following characters to be selected as ID:

- ABCDEFGHIJKLMNOPQRSTUVWXYZ #*
- abcdefghijklmnopqrstuvwxyz&@
- 0123456789<>()?!.,'-"/+=_END

Note: This entry is available only when using Revision 10.02 and above firmware.

Help: Enter a 28-character entry for this bay position.

Bay 701 - Report Select

This parameter allows the operator to designate the type of report to be printed for the bay. Selections are as follows:

- (0) Default
- (1) User Configurable Report 1
- (2) User Configurable Report 2

Note: This entry is available only when using Revision 10.02 and above firmware.

Help: Select the report type to be printed.

Bay 702 - Summary Report Print Time

This parameter allows the operator to specify the initial time of day at which a summary report will be printed. This report summarizes all transaction data on the bay for the interval defined in the Summary Report Interval parameter. The time can be expressed in standard or military format. The range of this entry is six characters.

Note: This entry is available only when using Revision 10.02 and above firmware.

Help: Enter time to print summary report. Time format is HH;MMT, where T=A,P,M

Bay 703 - Summary Report Interval

This parameter allows the operator to designate the interval of time covered by the Summary Report. If set to zero, the summary report is disabled. The range of this entry is 0 to 999 hours.

Note: This entry is available only when using Revision 10.02 and above firmware.

Help: Enter time intervals in hours between printed reports.

Bay 704 - Report Total Resolution

This parameter allows the operator to designate the volume resolution to be printed on default reports. Selections are as follows:

- (0) Whole
- (1) 10ths
- (2) 100ths

Note: This entry is available only when using Revision 10.02 and above firmware.

Help: Select the volume resolution to print on default reports

Page 2 • AB06058 Issue/Rev. 0.0 (7/04)

Bay 705 - Report Pages

This parameter allows the operator to designate the types of reports to be printed. Selections are as follows:

- (0) Batch and Transaction Pages
- (1) Batch Pages Only
- (2) Transaction Page Only
- (3) No Transaction Report

Note: This entry is available only when using Revision 10.02 and above firmware.

Help: Select which pages to print for reports

Bay 706 - Report HM Class

This parameter allows the operator to designate which arm's HM (Hazardous Materials) class is to appear on the report. The HM class printed on the bay transaction

report will be the HM class designated for the arm in Load Arm Parameter 706. Selections are as follows:

- (0) Arm 1
- (1) Arm 2
- (2) Arm 3
- (3) Arm 4
- (4) Arm 5
- (5) Arm 6

Note: This entry is available only when using Revision 10.02 and above firmware.

Help: Select which arm's HM class to print on summary page of default report

Issue/Rev. 0.0 (7/04) AB06058 • Page 3

The specifications contained herein are subject to change without notice and any user of said specifications should verify from the manufacturer that the specifications are currently in effect. Otherwise, the manufacturer assumes no responsibility for the use of specifications which may have been changed and are no longer in effect.

Headquarters:

1803 Gears Road, Houston, TX 77067 USA, Phone: 281/260-2190, Fax: 281/260-2191

Gas Measurement Products: Erie, PA USA Phone 814/898-5000 Thetford, England Phone (44) 1842-82-2900 Kongsberg, Norway Phone (47) 32/286-700 Buenos Aires, Argentina Phone 54 (11) 4312-4736 Integrated Measurement Systems:

Integrated Measurement Systems:
Corpus Christi, TX USA Phone 361/289-3400
Kongsberg, Norway Phone (47) 32/286-700
San Juan, Puerto Rico Phone 787/274-3760
United Arab Emirates, Dubai Phone 971 +4/331-3646

Liquid Measurement Products:
Erie, PA USA Phone 814/898-5000
Los Angeles, CA USA Phone 661/702-8660
Slough, England Phone (44) 1753-57-1515
Ellerbek, Germany Phone (49) 4101-3040
Barcelona, Spain Phone (34) 93/201-0989
Moscow, Russia Phone (7) 495/564-8705
Melbourne, Australia Phone (61) 3/9807-2818

Beijing, China Phone (86) 10/6500-2251 **Singapore** Phone (65) 6861-3011 **Chennai, India** Phone (91) 44/450-4400

Visit our website at www.fmctechnologies.com