



Australian Government

National Standards Commission

12 Lyonpark Road, North Ryde NSW 1670 Australia

Cancellation

Supplementary Certificate of Approval No S328

This is to certify that the approval for use for trade granted in Supplementary Certificate No S328 issued 22 April 1996 in respect of the

Gilbarco Model G-Site 2 Driveway Flowmeter Control System

submitted by Gilbarco Australia Limited
(formerly Gilbarco Aust. Ltd)
now of 20 Highgate Street
Auburn NSW 2144

has been cancelled in respect of new instruments as from 1 November 2003, with the exception of seven (7) instruments whose serial numbers are listed below (and which may be installed as new instruments and submitted for verification/certification after 1 November 2003):

Serial numbers: CMSB465759, CMSB465760, CMSB465761, DLSB456007,
EMSB500996, EMSB502412 and EMSB502413.

Signed by a person authorised under Regulation 60 of the National Measurement Regulations 1999 to exercise the powers and functions of the Commission under this Regulation.

A handwritten signature in black ink, appearing to be 'J. G. T.', is written over a faint circular stamp or watermark.

National Standards Commission



Supplementary Certificate of Approval

No S328

Issued under Regulation 9
of the
National Measurement (Patterns of Measuring Instruments) Regulations

This is to certify that an approval for use for trade has been granted in respect of the

Gilbarco Model G-Site 2 Driveway Flowmeter Control System

submitted by Gilbarco Aust. Ltd
12-38 Talavera Road
North Ryde NSW 2113.

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1 December 2000.
This approval expires in respect of new instruments on 1 December 2001.

Instruments purporting to comply with this approval shall be marked NSC No S328 and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked NSC No S328 in addition to the approval number of the instrument.

It is the submitter's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the Commission and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with the Commission's Document 106.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0/A.

The Commission reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

Special:

Instruments are only approved for installations incorporating the Commission-approved driveway flowmeters described in this approval, and may only be used for central unit price setting of driveway flowmeters which have been Commission-approved with that facility.

DESCRIPTIVE ADVICE

Pattern: provisionally approved 10 November 1995
approved 20 December 1995

A Gilbarco model G-Site 2 control system for use in a Commission-approved flowmetering system.

Variant: provisionally approved 10 November 1995
approved 20 December 1995

1. With up to four model G-Site 2 operator's consoles connected in a network.

Variant: approved 29 March 1996

2. With certain alternative Gilbarco flowmeter communication devices.

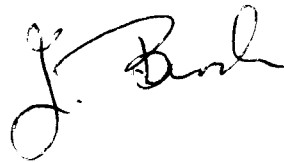
Technical Schedule No S328 describes the pattern and variants 1 & 2.

FILING ADVICE

The documentation for this approval comprises:

Supplementary Certificate of Approval No S328 dated 22 April 1995
Technical Schedule No S328 dated 22 April 1995 (incl. Test
Procedure)
Figures 1 to 5 dated 22 April 1995

Signed and sealed by a person authorised under
Regulation 9 of the National Measurement
(Patterns of Measuring Instruments) Regulations
to exercise the powers and functions of the
Commission under this Regulation.

A handwritten signature in black ink, appearing to read 'J. Bank', is written over the signature line.



National Standards Commission

TECHNICAL SCHEDULE No S328

Pattern: Gilbarco Model G-Site 2 Driveway Flowmeter Control System.

Submittor: Gilbarco Aust. Ltd
12-38 Talavera Road
North Ryde NSW 2113.

1. Description of Pattern

The pattern is a Gilbarco model G-Site 2 control system for use in a Commission-approved flowmetering system using Gilbarco driveway flowmeters.

1.1 The System

The system (Figure 1) may be used with up to 32 Commission-approved Gilbarco driveway flowmeters and comprises:

- . a Gilbarco model G-Site 2 controller (Figure 2);
- . a Gilbarco model G-Site 2 operator's console (Figure 3);
- . a Gilbarco remote purchaser's indicator;
- . one or two (*) Gilbarco Pump Interface Modules;
- . a receipt printer; and
- . an optional journal printer.

NOTE: (*) Two Pump Interface Modules are required when the system includes more than 16 driveway flowmeters.

The system facilities include:

- . a point of sale (POS) facility including a cash drawer or register;
- . an electronic funds transfer (EFT) facility;
- . a facility for centrally setting the unit price (refer to the Conditions of Approval);
- . a grade selection facility;
- . a preset function which may be used for prepay transactions;
- . a pump stop and all pumps emergency stop function; and
- . a dual-memory facility.

1.2 Controller

The model G-Site 2 controller (Figure 2) controls the various functions of the system including the driveway flowmeters, printers, operator's console and purchaser's indicator. It may be located remotely from the console. The controller uses Version 3.21 or Version 63.2# software (where # may be a variety of characters).

1.3 Console

The model G-Site 2 operator's console (Figure 3) communicates with the controller and allows authorisation of the driveway flowmeters. The console consists of a visual display unit (VDU) and keyboard connected directly to the controller. The console uses Version 10.1.3a or Version 62.0# software (where # may be a variety of characters).

1.3.1 Point of Sale Facility

The console incorporates point of sale (POS) facilities and these shall not interact with the controller or the console in any way which would cause an incorrect indication of the measured volume or price.

1.3.2 Card Reader Facility

The console incorporates a card reader facility which allows account and EFT transactions. The authorised cards may either be controlled distribution cards issued to selected users or financial institution cards available to the public.

1.3.3 Dual-memory Facility

This facility allows two purchasers to operate simultaneously, i.e. a second transaction may be carried out while a previous transaction which has not yet been completed is retained in memory.

Only one transaction for each driveway flowmeter may be stored in memory at any time.

The first purchaser carries out a delivery of fuel and the transaction data is indicated on both the purchaser's and vendor's indicators. After a period of not less than 5 seconds, and once the first purchaser has hung-up the nozzle but before the first transaction has been completed, a second purchaser can be authorised for the same flowmeter. The details of the first transaction are stored in the memory, printed in the journal (if fitted) or on the receipt, and can be shown on both the vendor's and purchaser's displays.

The details of the first delivery will be displayed whenever the flowmeter NUMBER button is pressed. Operation of the CURRENT/STORED button will allow the second transaction to be displayed on the purchaser's display. The status of the transaction is indicated on the vendor's display.

The transactions are completed by using the flowmeter NUMBER button and CURRENT/STORED button to display the sale appropriate to the purchaser on both the vendor's and purchaser's indicators and then completing the transaction.

1.4 Pump Interface Module

A Gilbarco Pump Interface Module allows the communication between the controller and each group of up to 16 flowmeters. It also allows the operator to electrically disconnect any of the driveway flowmeters from the controller.

1.5 Sealing and Verification/Certification Provision

No sealing is required.

Provision is made on the G-Site 2 controller and the G-Site 2 operator's console for a verification/certification mark to be applied.

1.6 Markings

The G-Site 2 controller and the G-Site 2 operator's console are each marked with the following data, together in one location:

Manufacturer's name or mark	
Model number	
Serial number	
NSC approval number	NSC No S328
Operating (air) temperature range	0°C to 40°C

2. Description of Variants

2.1 Variant 1

With up to three additional G-Site 2 operator's consoles connected in a network with one G-Site 2 controller. Each additional console requires a model G-Site 2 terminal, which externally is identical to the G-Site 2 controller (Figure 2).

The network (Figure 4) enables the following operations to be processed for all 32 driveway flowmeters by any one console at any particular time:

- flowmeter status and authorisation;
- sales transactions and voiding;
- pump stop and emergency stop;
- central unit price setting (refer to the Conditions of Approval); and
- common management functions (e.g. shift details, total sales).

Provision is made on each G-Site 2 terminal for a verification/certification mark to be applied. Each G-Site 2 terminal is marked in the same manner described for the G-Site 2 controller.

2.2 Variant 2

With a Gilbarco model DDM data distribution module and a Gilbarco Communications Interconnect Box replacing the Pump Interface Module described for the pattern and variant 1. A typical system is shown in Figure 5.

The data distribution module allows the communication between the controller and each group of up to 16 flowmeters.

The Communications Interconnection Box allows the operator to electrically disconnect any of the driveway flowmeters from the controller.

TEST PROCEDURE

Instruments should be tested in accordance with any tests included in the approval documentation for the driveway flowmeter/s to which the pattern is connected, as appropriate, and in accordance with any relevant tests specified in the Inspector's Handbook.

The maximum permissible errors applicable are those applicable to the system to which the pattern is connected, as stated in the approval documentation for the system.

1. Postpay Mode (including dual-memory test)

- (i) At any driveway flowmeter, remove a nozzle from its hang-up position.
- (ii) At the console authorise the flowmeter by pressing the flowmeter NUMBER button and then the AUTHORISE button.
- (iii) At the flowmeter deliver sufficient fuel to cause the price and quantity indicators to move significantly off zero.

Stop the flowmeter by returning the nozzle to its hang-up and record the details of the delivery.

Remove the nozzle from its hang-up position again and check that the flowmeter indicator does not reset to zero.

- (iv) At the console, check that the price and volume displayed are the same as the price and volume recorded from the flowmeter.
- (v) At the same flowmeter, perform another delivery as per (i) to (iii) above.

- (vi) At the console check that both transactions are displayed as described in the operational details of the dual-memory facility given in the Technical Schedule.
- (vii) Attempt to authorise a third delivery from the same flowmeter by using the flowmeter NUMBER button and then the AUTHORISE button; this should not be possible.
- (viii) Observe that the indications for both transactions are displayed on the VDU.
- (ix) By using the CURRENT/STORED button complete the 'CURRENT' transaction by pressing the FUEL button and a pay media (CASH, CREDIT or CHEQUE) button and then similarly complete the 'STORED' transaction. Check that as each transaction is completed the data for the transaction is displayed on the purchaser's indicator.

Check that both memories are now clear.
- (x) Repeat steps (i) to (ix) for a number of driveway flowmeters.

2. Prepay Mode

The operation in prepay mode is similar to that described above.

- (i) At the console, authorise a flowmeter by pressing the flowmeter NUMBER button and the AUTHORISE button.
- (ii) While the delivery is in progress, attempt to authorised a prepaid transaction (by selecting the flowmeter, entering a cash value via the keyboard, pressing the FUEL button, and then a payment media button); this should not be possible.
- (iii) Complete the delivery by returning the nozzle to its hang-up position.
- (iv) Authorise a prepaid transaction for the flowmeter as in (ii) in the second memory using the CURRENT/STORED button. The console will accept the authorisation and issue a receipt indicating acceptance of the price, which flowmeter is to be used, and the time and date. Check that the preset value is displayed on the VDU and on the flowmeter preset display panel.
- (v) Start the delivery and observe that the flowmeter stops on the preset value, and that when the nozzle is returned to its hang-up, no amount is due at the console for this transaction. Complete the transaction.

- (vi) Repeat the above for another flowmeter.
- (vii) Commence another delivery but hang-up the nozzle before the prepaid value is reached. Observe that the details of the incomplete transaction are displayed.
- (viii) Complete the transaction and observe that details on the receipt issued and the console indications are the same.

Try to re-authorise the flowmeter; this should not be possible for at least 3 minutes from the time that the nozzle is hung-up.
- (ix) If there is a flowmeter on site to which a preset panel and indicator are not fitted and/or there is no remote purchaser's indicator connected, attempt to authorise a prepay delivery at the console; this should not be possible.

3. Networked System

For a networked system (Variant 1) the following tests are additional to those above:

3.1 Postpay Mode

- (a) Authorise a driveway flowmeter from one console and then attempt to authorise the same flowmeter from another console; this should not be possible.
- (b) On completion of a delivery, pay off the transaction at any console. Attempt to pay off the same transaction at another console; this should not be possible.

3.2 Prepay Mode

For the same flowmeter, attempt to authorise a prepaid transaction at a second console; this should not be possible.



National Standards Commission
Notification of Change
Supplementary Certificate of Approval No S328
Change No 1

The following changes are made to the approval documentation for the
Gilbarco Model G-Site 2 Driveway Flowmeter Control System

submitted by Gilbarco Aust. Ltd
 12-38 Talavera Road
 North Ryde NSW 2113.

1. In Supplementary Certificate of Approval No S328 dated 22 April 1995:
 - (a) The references at the top of the pages of the Supplementary Certificate and in the **Filing Advice** should be amended by changing the date to read "22 April 1996".
 - (b) The **Condition of Approval** referring to the expiry of the approval should be deleted.
 - (c) The **Special Condition of Approval** should be replaced by the following;
"Instruments are approved for use with any compatible Commission-approved driveway flowmeter (fuel dispenser for motor vehicles), provided that no software/hardware changes are made to either the control system or the flowmeter and that no additional software or hardware is required.
Instruments may only be used for central unit price setting of driveway flowmeters which have been Commission-approved with that facility."
2. In Technical Schedule No S328 dated 22 April 1996, the references to 'Gilbarco driveway flowmeters' in clauses 1 and 1.1 should be amended by removing the word 'Gilbarco'.

Signed and sealed by a person authorised under Regulation 9 of the National Measurement (Patterns of Measuring Instruments) Regulations to exercise the powers and functions of the Commission under this Regulation.

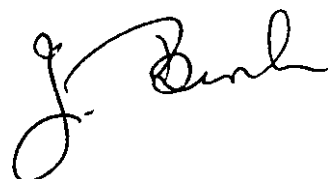
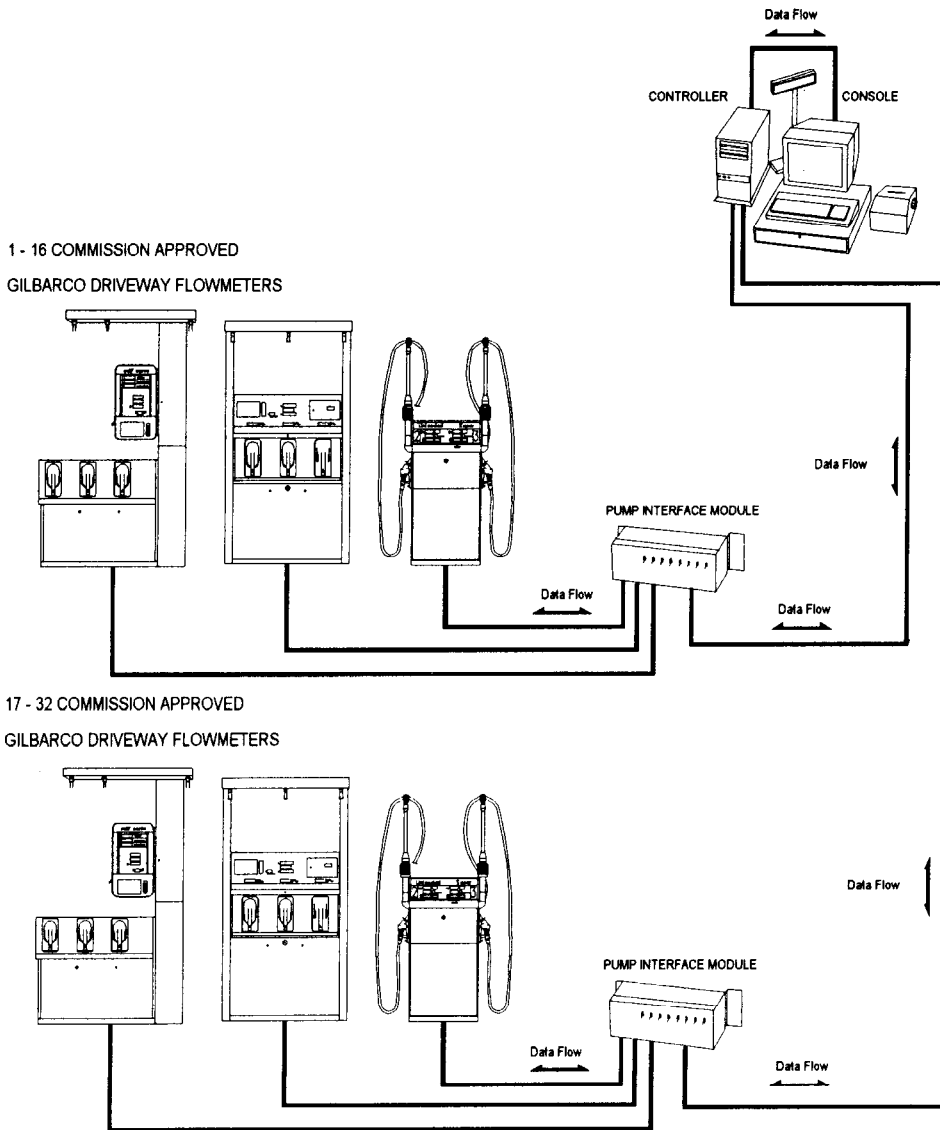
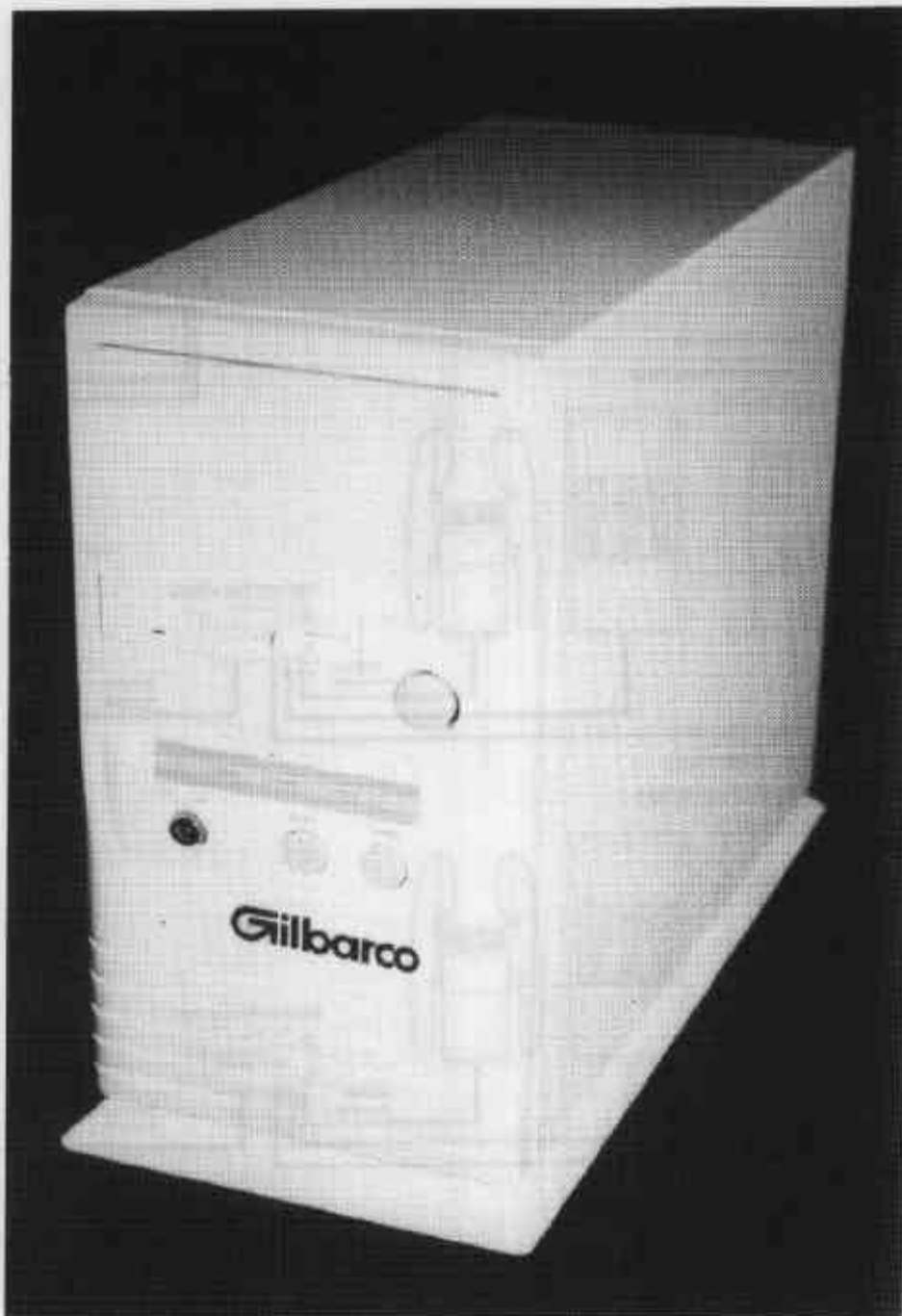


FIGURE S328 - 1



Typical Gilbarco Model G-Site 2 System (Pattern)

FIGURE S328 - 2



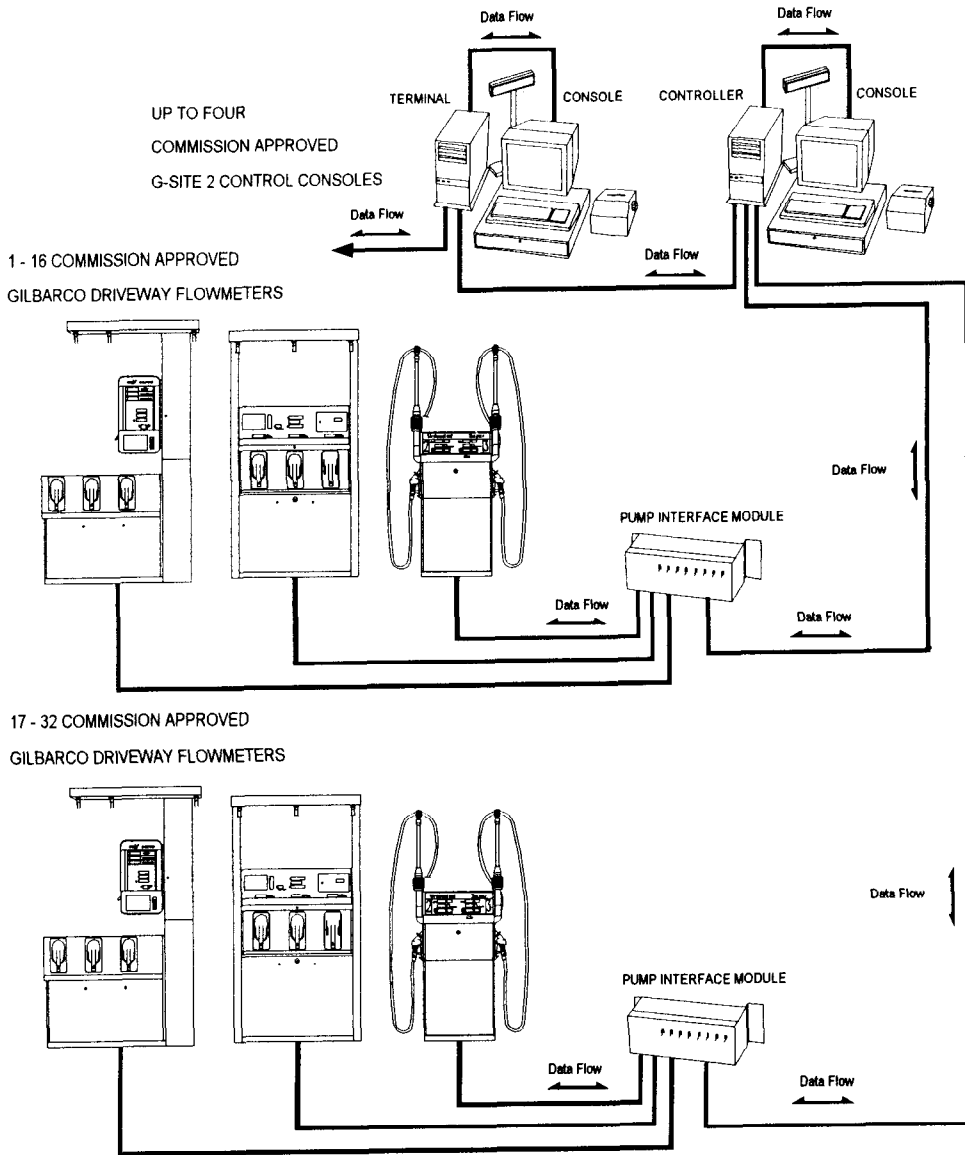
Gilbarco Model G-Site 2 Controller

FIGURE S328 - 3



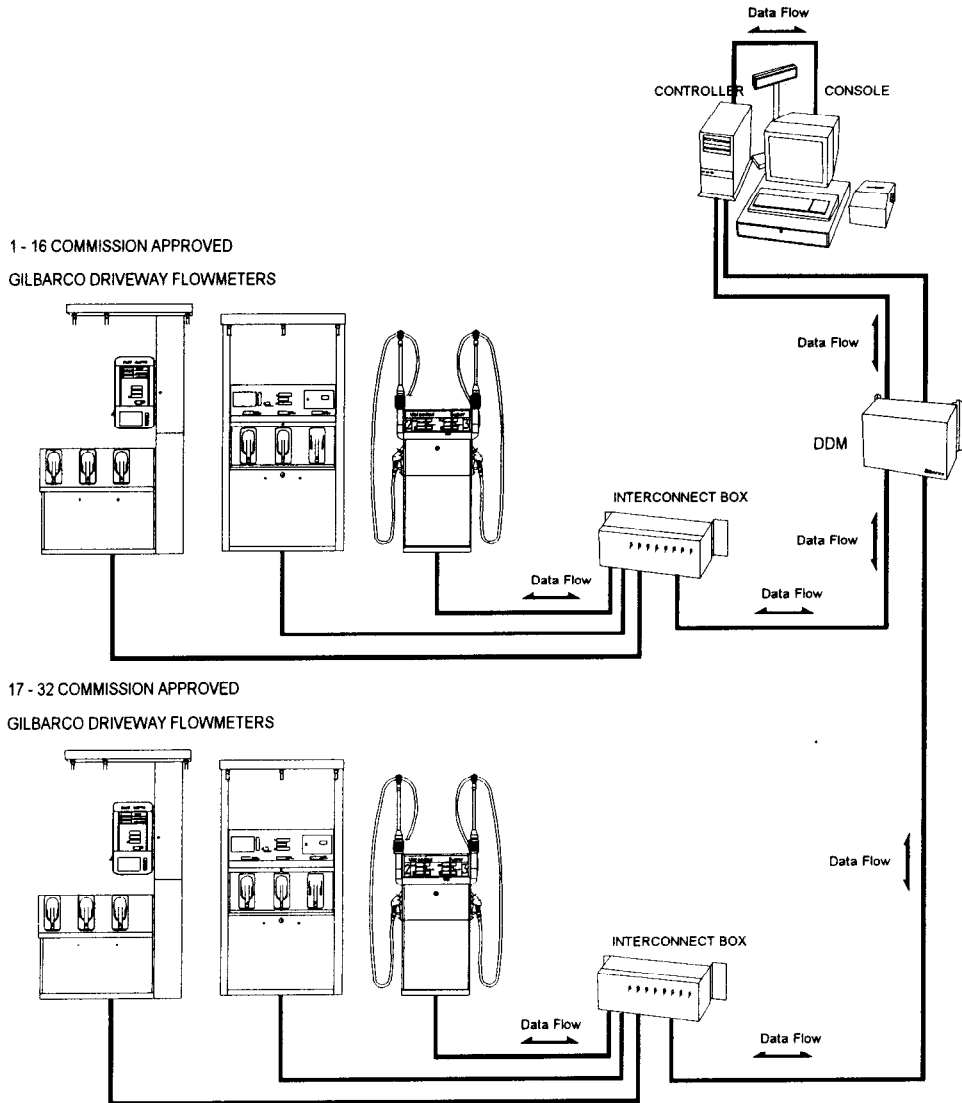
Gilbarco Model G-Site 2 Operator's Console

FIGURE S328 - 4



Typical Multiple Console System (Variant 1)

FIGURE S328 - 5



Typical Alternative Communication Device System (Variant 2)