



InSight

Sampler Controller

Introduction

The InSight Sample Controller is the best choice for sampling applications. Based on a modular design it provides the guarantee of accurate real-time operation and samples in either a flow or time proportional manner. Incorporating control functions for pipeline mixers and product temperature monitoring the InSight Controller will operate samplers at 100 grabs per minute and uses signals from automatic *Can-Weigh* stations to produce performance factor calculations. The Sample Controller will perform pre-batch linefill and can operate in single or multi-batch mode.

Features

- Operator Friendly
- Designed for easy DCS integration
- Performs flow or time proportional sampling.
- Auto can change up to 4 cans
- Built in emergency stop when cans are full.
- Single or multi-batch modes.

The InSight is so named for its touch screen interface which is both easy to use and offers sophisticated configuration options for supervisors and engineers. It can be configured using a simple menu structure with clear prompting and is aided by a context sensitive help. The InSight Sample Controller offers full diagnostic facilities with four levels of security and can be fully configured from the front panel. System configurability is further enhanced by the use of a wireless infra red link which allows configuration, reporting and operation from a suitable 'Windows' PC.

The InSight Controller uses a real-time 32 bit, multi-tasking operating system and is designed to be operated as either, stand alone, or integrated as part of a Distributed Control System. The Controller supports Allen-Bradley and Modicon Modbus protocols and has two serial ports as standard offering either RS232, RS 422 or RS485.

- Full diagnostics available.
- Performs performance calculations to check system integrity.
- Performs pre-batch line fill (either pass volume or separate sample).
- Product temperature monitoring.
- Full supervisor override at all times.
- Complies with ISO 3171, IP 6.2 & API 8.2

Data Sheet S063-0504-3 • InSight Sampler Controller



Instrument Specification

Accuracy	Calculation	IEEE 32 bit floating point
Touch Screen	Viewing Area Resolution Keys	126mm x 70mm (H x W) 240 x 128 pixel with fluorescent backlight Software defined with audio confirmation
Status Indication	Front Panel LEDs Alarms	Power - System Running - Security Status - Watchdog Timer - Alarm Status Software user-defined
Number I/O Cards	Standard Instrument	2 max
Power	Voltage Frequency Consumption Output	110 - 240VAC 50 - 60Hz 40W - typical 24V fused @ 250mA
Environment	Temperature Range Humidity	5 - 40°C 5% - 90% (non-condensing)
Dimensions	Instrument Panel Cut out	146mm x 286mm x 355mm (W x H x D over connectors) 282mm x 137mm
Standards	Manufacture	The InSight Controller is manufactured in accordance with ISO 9001

I/O Card Specification (Each Card)

Analogue Inputs	Quantity Input Type Accuracy Input Level Current Load Configuration Protection	6 Differential > 5µA 4 - 20 mA 50 Ohm Software user-defined Surge and ESD protected
Pulse Inputs	Quantity Input Type Input Voltage Logic Threshold Frequency Range Configuration Protection	4 Differential current or voltage pulse 0 - 24V DC or 4 - 20 mA Software user-defined 0 - 10 KHz Software user-defined Surge, ESD and reverse polarity protected on voltage pulse inputs
Analogue Outputs	Quantity Output Accuracy Load Configuration Protection	4 4 - 20mA 5µA 500 Ohm max Software user-defined Surge and ESD protection
Digital Event I/O	Quantity Type Configuration Input Level Output Level Protection	16 Bi-directional Software user-defined for either Input or Output 24VDC @ 0.5 mA max 24VDC @ 100mA max Opto isolated and fused
Serial Ports	Quantity Protocols Connection Protection	2 per I/O card RS232 (DTE) - RS485 - RS422 9 pin 'D' type ESD protected
* Modbus TCP over ethernet available with optional serial to ethernet converter		
Watchdog	Type Output Type Time Out	Continuity N/C - solid state volt free contact. Open on Alarm 1.6 seconds

	UK	USA	Cameron	Jiskoot Quality Systems A Cameron Company
	Jiskoot Quality Systems	Jiskoot Quality Systems	Measurement Systems	www.jiskoot.com
	Tel: +44 (0)1892 518000 Fax: +44 (0)1892 518100	Tel: +1 281 583 0583 Fax: +1 281 583 0587	Tel: +1 281 582 9500 Fax: +1 281 582 9599	
	Email: ms-jiskootuksales@c-a-m.com Email: ms-jiskootusales@c-a-m.com Email: ms-marketing@c-a-m.com			www.c-a-m.com/flo