DataWeb 4000 series

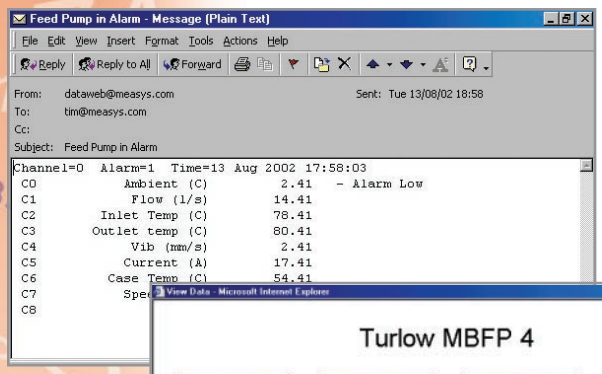
Ethernet/Internet remote asset monitoring

Data and alarms direct to your desk...

4008: *8 analog inputs (4-pole)*

New! ***4016:*** *16 analog inputs (2-pole)*

- **No client software needed - uses Internet Explorer 5.0+**
- Real-time direct access to analog and digital measurements from any location via Ethernet (Internet or Intranet)
- Flexible, accurate measurement in a rugged enclosure
- Configurable hi and lo alerts/alarms on all analog channels
- New! Autonomous report download via configurable email
- Email on alert and alarm
- New! Flexible pulse counting on analog inputs - ideal for metering
- On-board data storage in CSV format
- Acquisition on alarm or digital trigger
- Accessible via Ethernet (TCP/IP) or PSTN/GSM modem


Feed Pump in Alarm - Message (Plain Text)

File Edit View Insert Format Tools Actions Help

Reply | Reply to All | Forward

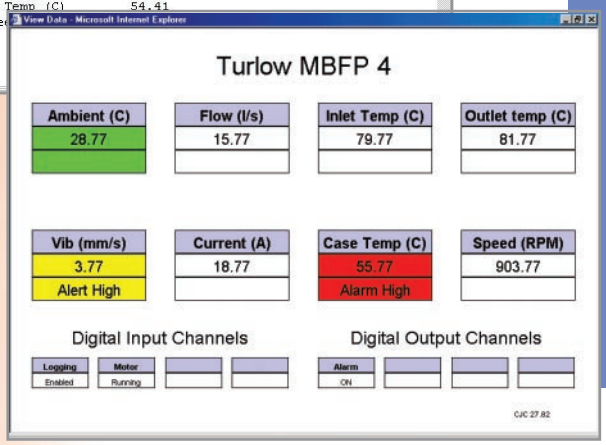
From: dataweb@measys.com Sent: Tue 13/08/02 18:58

To: tim@measys.com

Cc:

Subject: Feed Pump in Alarm

```
Channel=0  Alarm=1  Time=13 Aug 2002 17:58:03
C0          Ambient (C)          2.41   - Alarm Low
C1             Flow (l/s)        14.41
C2        Inlet Temp (C)         78.41
C3       Outlet temp (C)         80.41
C4            Vib (mm/s)          2.41
C5          Current (A)          17.41
C6         Case Temp (C)         54.41
C7          Speed (RPM)         903.41
C8
```



Typical applications

Remote process and asset monitoring previously deemed uneconomic

Auxiliary machinery fault warning and detection

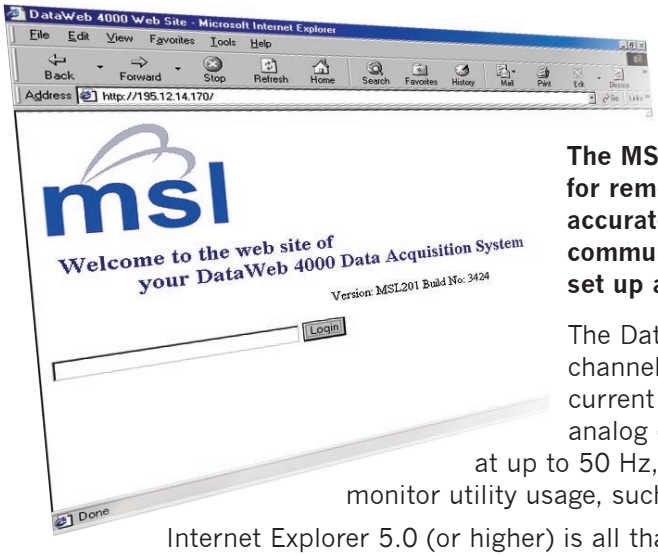
Remote utility metering (gas, water, etc.)

Structural monitoring for buildings

Environmental monitoring

Storage tank level monitoring linked to automatic re-ordering system

Remote logging at outstations



The MSL DataWeb 4000 series opens up exciting new possibilities for remote asset monitoring and data acquisition. Flexible and accurate analog and digital measurement is combined with advanced communications in a highly affordable package which is simple to set up and easy to use.

The DataWeb unit is DIN-rail mounted unit providing eight digital channels with eight or sixteen analog channels (supporting voltage, current and thermocouple sensors) in a rugged and compact unit. The analog channels can also be individually configured for pulse counting at up to 50 Hz, making DataWeb 4000 ideal for applications needing to monitor utility usage, such as gas, electricity, and water consumption.

Internet Explorer 5.0 (or higher) is all that is required to communicate with DataWeb, minimising user software costs and enabling multiple users simultaneous access to plant data from any location. Login is password protected to prevent unauthorised access. Data transfer is via an Ethernet network, the Internet or the integral RS232 port with an external modem. Data can be viewed in real-time or as historic CSV files, simplifying import into other Windows™ applications such as Excel and Word.

Real-time data for all channels is available in a single screen displaying user-defined channel tag names and the current alert and alarm status as a simple green, yellow or red background box per channel. Separate general and triggered loggers are available offering data capture rates up to 10 readings per second.

DataWeb's powerful alarm facilities include two alert and alarm levels on each analog channel. When an alert or alarm occurs, configurable email messages are automatically generated, each with user-defined text and mailing list; these can also include current real-time data for each channel. DataWeb 4000 can also be configured to email regular data reports to chosen recipients at specified times.

Overview Specification

Analogue channels
- 4016 . . . . . .16 inputs (2-pole)
  - sensors .voltage, thermocouple, 4-20 mA, status
- 4008 . . . . . .8 inputs (4-pole)
  - sensors . . . . . .as 4016 plus: resistance, PT100
- ranges . . . .10 V, 2.5 V, 1 V, 250 mV, 100 mV, 25 mV
- basic accuracy . . . . . .0.05% fs
- resolution . . . . . .user selectable up to 6 digits
- thermocouple types . . . . . .B, E, J, K, N, R, S, T
- isolation
  - channel - channel . . . . . .10 V DC
  - channel - ground . . . . . .1 000 V DC
- CMRR . . . . . .90 dB on 2.5 V range
- alert detection levels . . . . . .2 per range
- alarm detection levels . . . . . .2 per range

Digital channels . . . . . .4 input, 4 output
- logging trigger . . . on digital channel 0, TTL hi or lo
- alarm output . . . . . .on digital channel 4

Max. update rate (all channels)
- 4016 . . . . . .50 Hz / channel
- 4008 . . . . . .100 Hz / channel

Network
- type 10BaseT
  - serial port 1.2 kB, 4.8 kB, 9.6 kB, 33.6 kB

File Transfer . . . . . .FTP or HTTP
- File format . . . . . .CSV

General Logger
- logging rate . . . . . .user selectable up to 1 rdg/s.
- max stored readings 13 100
- memory . . . . . .volatile (data lost if power removed)
- file structure . . . . . .new file opened every 24 hours
- mode . . . . . .off / triggered / continuous
- trigger . . . . .any channel alarm or digital channel 0

Event Logger
- logging rate . . . .user selectable from 1 to 10 rdg/s.
- max stored readings 13 100
- memory . . . . . .non-volatile (data retained if power removed)
- file structure . . . . . .single file (new data appended)
- mode . . . . . .off / triggered
- trigger . . . . user defined analog channel conditions
- pre/post event buffer . . . . . .user defined

General
- Operating Temperature . .-5 to +45 °C *(23 to 113 °F)*
- Humidity . . . . . .90% (Non-Condensing)
- Power Supply . . . . . .9 to 24 V DC at 6 W max
- Dimensions (h x w x d) . . . . . .115 x 230 x 80 mm *(4.5 x 9.0 x 3.1 in.)*
- Weight . . . . . .0.8 kg *(1.76 lb)*

Specification subject to change without notice

msl
Measurement Systems Ltd
16 Kingfisher Court
Newbury, Berkshire
RG14 5SJ
Tel: +44 (0)1635 576800
Fax: +44 (0)1635 31023
www.measurementsystems.co.uk