Hathaway

IDM 16/32

DFR UPGRADE

New data acquisition, communications and Master Station capabilities for existing DFRs

The IDM 16/32 is a powerful, cost effective upgrade that will extend the life of your DFR installed base into the next millennium.

This economical data acquisition system features:

- Field replaceable - 100% compatible
- Analog and event field wiring undisturbed
- Communications to Windows 95/98/NT Master Station
- Full complement of software sensors available
- 16-bit analog resolution
- Expand / interface to IDM modules

TECHNICAL OVERVIEW

The IDM 16/32 is a set of upgrade cards for your existing Hathaway DFR, which will transform it into a new fully integrated power system monitoring device. As the existing field wiring is not disturbed, this upgrade is quick and simple and avoids the requirement for alterations to existing wiring drawings.

The new hardware incorporates a DSP which calculates complex power quantities, for triggering and recording, in a number of different modes. An integral Ethernet TCP/IP port allows interconnection of devices and expansion using additional IDM modules.

Software obsolescence is avoided by using Flash EPROMs, allowing future upgrades to be made remotely via modem.

If used with a GPS receiver, either internal or external, all IDMs and IDM 16/32s can be configured to sample simultaneously across a network, or interconnecting networks, allowing network wide phasor calculations to be made.

SPECIFICATION*

PROFILE

- 16 analog, 32 event acquisition unit
- Two relay outputs for alarms
- Sample rates to 7.68kHz
- Built in self checking functions
- 16Mb of DRAM
- *Replay™ Plus* Master Station software

FRONT PANEL

2 row x 16 character LCD display. Ten status LEDs.

RELAY OUTPUTS

Two alarm outputs with Form C contacts for failure alarm and operate signal.

COMMUNICATIONS

Ethernet network. TCP/IP protocol. Integral twisted pair and fibre interfaces. RS232 / RS485 port for remote communications and an additional RS232 port for local configuration.

REAL TIME CLOCK

Can be synchronized to 50/60Hz line voltage, external 1pps or GPS clock. Accuracy of one second per day.

PRINTOUT

Local printout available using a serial printer on any serial port. (Multiple DAUs can be networked to one printer).

FAULT RECORDING

Record lengths:

Pre-fault time:- 50ms - 5s.
Fault time:- 100ms - 5s (controlled by operation limiter).
Post-fault time:- 100ms - 1s.

Sample rate: (32, 64 or 128 samples per cycle).

50 cycles:- 1.6kHz, 3.2kHz or 6.4kHz.
60 cycles:- 1.92kHz, 3.84kHz or 7.68kHz.

Triggering:

Level and rate of change triggers on all AC analog channels.
Settings from 5% to 95%, continuously variable.
Each analog trigger has an individual operation limiter. Analog triggering accuracy shall in all cases be better than 0.5% of channel full scale.
Event triggers on open, close, both or none.
Negative sequence triggering, zero sequence triggering, frequency level and rate of change triggering are available. Level triggers will also be provided on calculated quantities such as MW, Mvar, etc.

Communications and configuration:

Fully configurable using *Replay™ Plus* software.

*Hathaway's policy of continuous product improvement may mean that equipment supplied differs slightly from this specification.

Hathaway

15 Wildflower Way
Belfast
BT12 6TA
Northern Ireland

Telephone: +44 1232 225200
Fax: +44 1232 225225
Internet: www.hathaway-systems.com

8228 Park Meadows Drive
Littleton
Colorado 80124
USA

Telephone: +1 303 799 8200
Fax: +1 303 799 8880
Internet: www.hathawaycorp.com