

**VDAS® FCAI**

## 32-WAY PRESSURE DISPLAY UNIT

A 32-way pressure measurement and display unit for use with TecQuipment's FC series flumes (FC300, FC600).



### KEY POINTS

- Ancillary to TecQuipment's water channels (FC300 and FC600)
- Measures and displays up to 32 pressures from models, Pitot tubes, the flume bed and other devices
- Quicker, easier and more versatile than using liquid manometers
- Integral LCD allows direct pressure measurement
- Measures pressures with respect to atmosphere
- Fully compatible with TecQuipment's Versatile Data Acquisition system (VDAS®) to enable accurate real-time data capture, monitoring and display on a computer

# 32-WAY PRESSURE DISPLAY UNIT

## DESCRIPTION

The 32-Way Pressure Display Unit is an optional ancillary to TecQuipment's Flow Channels (FC300, FC600). It measures and displays up to 32 pressures from models, Pitot tubes and other measuring instruments fitted to a water channel. It is ideally suited to applications where multiple pressure measurements are required, for example in flow over spillways and through sluice gates.

The unit mounts onto the control and instrumentation frame of the (FC300 or FC600) water channels. Connection to each of the 32 calibrated pressure transducers is via quick-release pressure inputs mounted on the front panel of the unit. This allows easy and quick connection between the unit and an experiment mounted in a water channel. All pressures are measured with respect to atmosphere.

The unit has an integral liquid crystal display with a scroll switch that allows all 32 channels to be viewed in groups of four at any time.

The conditioned outputs of the pressure sensors, and any other connected compatible electronic instruments, may be output to TecQuipment's Versatile Data Acquisition System (VDAS-FC), available separately to allow computer-based data acquisition and display. Using VDAS® enables accurate real-time data capture, display, calculation and charting of all relevant parameters on a suitable computer (computer not included). When the 32-Way Pressure Display Unit is combined with TecQuipment's VDAS®, it allows laboratory time to be used more efficiently compared to recording data manually. The facility in the software to average data to remove the fluctuations inherent in water channel measurements, enhances the quality of the results by making their interpretation much easier. This provides significant experimental advantages over conventional instruments such as manometers.

## STANDARD FEATURES

- Supplied with comprehensive user guide
- Five-year warranty
- Made in accordance with the latest European Union directives
- An ISO 9001 certified company

## ANCILLARY FOR

- Water Channels (FC300, FC600)
- Sluice Gate With Tappings (FC300c)
- Ogee Weir With Tappings (FC300e2)

## ESSENTIAL SERVICES

### ELECTRICAL SUPPLY:

12 V DC

**NOTE:** A suitable electrical supply outlet is included in the base of the Water Channel controller.

## SPECIFICATION

TecQuipment is committed to a programme of continuous improvement; hence we reserve the right to alter the design and product specification without prior notice.

### DIMENSIONS:

Nett: height 450 mm x width 350 mm x depth 220 mm

Packed: 0.11m<sup>3</sup>

### WEIGHT:

Nett: 10 kg

Packed: 20 kg

### PRESSURE SENSORS:

32 pressure transducers calibrated at a maximum of  $\pm 7$  kPa

## OPERATING CONDITIONS

### OPERATING ENVIRONMENT:

Laboratory

### STORAGE TEMPERATURE RANGE:

-25°C to +55°C (when packed for transport)

### OPERATING TEMPERATURE RANGE:

+5°C to +40°C

### OPERATING RELATIVE HUMIDITY RANGE:

80% at temperatures < 31°C decreasing linearly to 50% at 40°C