

Panel mounting 2 channel display and datalogger **MultiPanel 2025**

- Two channels, for selectable mA, Voltage or frequency sensor inputs
- 3rd channel for differential or power with Min & Max readings, all on one backlit LCD screen
- Rate, frequency & counting options
- Switching relays & mA or V signal outputs
- USB & RS232 data transmission
- Uses HYDROLINK 6 software to record or monitor live via PC and analyse test data



R & D

Mobile hydraulics

End of Line Testing

Plant maintenance

Industrial hydraulics

The new MultiPanel 2025 is a sophisticated control panel designed to monitor and display test data over time. With two switchable measuring channels and a 3rd differential or P(kW) channel the MultiPanel 2025 can display & record two different parameters over time with up to 60,000 readings per test. Scan rates are 1ms to 10s offering short high resolution testing or longer term recording.

DIGITAL MEASUREMENT & DISPLAY DATA LOGGER

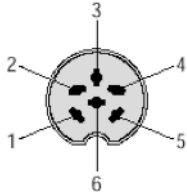
MultiPanel 2025

TECHNICAL SPECIFICATIONS

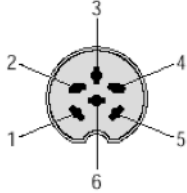
INPUTS	
Channel inputs	Selectable analogue or frequency or differential
Signal Inputs	0/4...20mA, 0/2...10V, frequency PnP (rate or count).
Signal Digital Input	Channel 4 - 1.14V - 1.54V
Accuracy	Analogue $\pm 0.2\%$ full scale. Frequency $\pm 0.1\%$ of actual reading
Calculated channels	One channel for differential pressure or hydraulic power dependent on sensors connected, Min & Max

DATALOGGING	
Max No. of tests	5
Values per test	up to 60,000 for each of the five recordings
Sampling rate	One sample every 1ms
Memory capacity	2 Megabytes
Scanning rates	Selectable in five steps: 1ms, 10ms, 100ms, 1s and 10s.

INSTRUMENT	
Display	2.6" LCD with backlight (160 x 80 pixels resolution)
PC interface	USB 2.0 UART (Virtual COM interface)
Casing	ABS Plastic
Power supply unit	110/240V 50/60Hz Universal mains/USB power adaptor (5V and 500mA output)
Sensor power supply	Nominal 13.4-14.2 VDC 50-140mA
Casing/Dimension	ABS plastic (L 201mm x W 90mm x H 52.5mm)
Weight	298g
Protection levels	IP 40. Vibration to IEC 60068-2-64: 1994. Shock to IEC 60068-2-27: 1996-03.
Operating Temp.	-20 to +50°C with 0-80 relative humidity
Storage Temp	-25 to +60°C

SIGNAL INPUT 1			
M16 6 pin female socket numbered pins 	Designation	Pin	Function
	SIGN_I/SIGN_F	1	Analogue signal input 0/4 to 20 mA and frequency signal
	GND	2	Ground
	+Ve	3	Sensor power supply
	SIGN_U/SIGN_DIR	4	Analogue signal input 0/2 to 10V / signal detection direction
	Shield	5	Screen/shield
	ISDS	6	Sensor detection

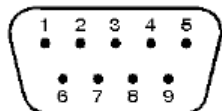
Notes. mA input 190 Ω / 1nF input impedance. Voltage input 42.1 Ω / 1nF input impedance. Frequency input 100k Ω / 1nF input impedance

SIGNAL INPUT 2			
M16 6 pin female socket numbered pins 	Designation	Pin	Function
	SIGN_I/SIGN_F	1	Analogue signal input 0/4 to 20 mA and frequency signal
	GND	2	Ground
	+Ve	3	Sensor power supply
	SIGN_U/SIGN_DIR	4	Analogue signal input 0/2 to 10V / signal detection direction
	Shield	5	Screen/shield
	ISDS	6	Sensor detection

DIGITAL MEASUREMENT & DISPLAY DATA LOGGER

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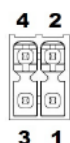
D-SUB MALE CONNECTOR RS232



Designation	Pin	Function
+Ub	1	Power Supply (+5VDC or 200mA max)
RXD	2	RS232 signal RXD
TXD	3	RS232 signal TXD
GND	5	Ground
-	6	Pin for bootloader
-	8	Pin for bootloader

TERMINAL BLOCK MALE CONNECTOR

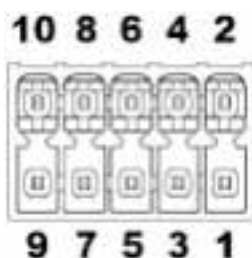
Power Supply



Designation	Pin	Function
+U_{bat}	1	Power Supply via external batteries $V_{max} \leq 3, 6VDC$
+Ub	2	Power Supply 7 to 32VDC
GND	3	RS232 signal TXD
GND	5	Ground

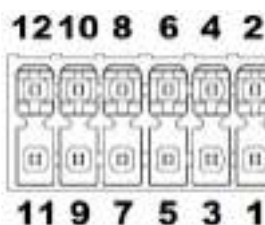
TERMINAL BLOCK MALE CONNECTOR

Power Supply



Designation	Pin	Function
Iout (0/4-20mA)	1	Analogue current output
GND	2	Ground
Uout I (0/2-10V)	3	Analogue voltage output
GND	4	Ground
EI (Trigin)	5	Trigger input
GND	6	Ground
AI (TrigOut)	7	Trigger output
RCOM (Relay common)	8	Relay changer
RNC	9	Relay closer
RNO	10	Relay opener

TERMINAL BLOCK MALE CONNECTOR



Designation	Pin	Function
I/F2	1	Analogue signal input 20mA/frequency signal of channel 2
I/F1	2	Analogue signal input 20mA/frequency signal of channel 1
GND	3	Ground
GND	4	Ground
+Ub	5	Sensor 2 power supply (+Ub or 14VDC)
+Ub	6	Sensor 1 power supply (+Ub or 14VDC)
U/F2	7	Analogue signal input 10 V/ signal detection direction of channel 2
U/F1	8	Analogue signal input 10 V/ signal detection direction of channel 1
PE	9	Potential Earth connection
PE	10	Potential Earth connection
SSK2	11	Sensor detection (ISDS) of channel 2
SSK1	12	Sensor detection (ISDS) of channel 1

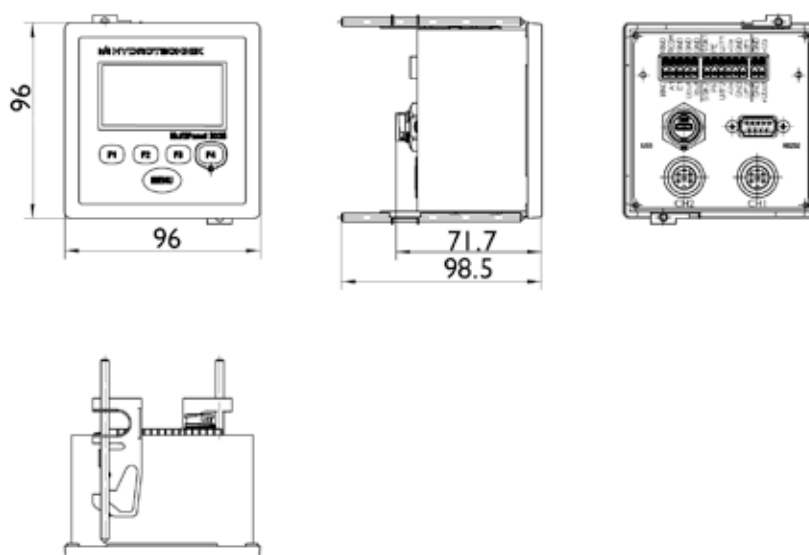
DIGITAL MEASUREMENT & DISPLAY DATA LOGGER

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ELECTRICAL CHARACTERISTICS

Parameter	Min	Type	Max	Unit	Condition
Input signal current	0		20	mA	-
Input impedance current	-	170Ω / 1nF	-	-	-
Error limit 20 mA signal input	-	-	±0.2	%FS	-
Input signal voltage	0	-	10	V	-
Voltage input impedance	-	42.1kΩ / 1nF	-	-	-
Error limit 10V signal input	-	-	±0.2	%FS	-
Frequency Input signal	1	-	10.000	Hz	Not verified with direction
Input impedance	-				
Error limit frequency signal input	-	100 kΩ / 1nF	-	-	-
Signal digital input (trigger)	1.14V (THL)	Low / High	1.54V (THH)	5V TTL	Channel 4 (Trigger. In)
Signal digital output	OV + 0.1V	Low / High	3.3V / ±0.1V	-	Channel 5 (Trigger. Out)
Analogue current output	~75μA / ~80mV	-	21.5mA / 11V	-	Channel 5 (Trigger. Out)
Error limit analogue outputs	-0.05 / -0.02	-	+0.15 / +0.8	%FS	0-20mA / 0-10V
Error limit analogue outputs	0 / -0.02	-	+0.15 / +0.15	%FS	4-20mA / 2-10v
Power supply sensor	13.4 50				

ASSEMBLY DIMENSIONAL DRAWING



ORDER NUMBER/ACCESSORIES

MultiPanel 2025	3160-00-80.00
Measuring cable, connector pole - socket 16 M16 6 pole	8824-S1-02.50H
Power supply with open circuit ends - 115 / 230 VAC	8812-20-03.00
Micro USB data cable	8824-R4-02.00

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