
Hyper Unicorder
Pen recorder unit
M-1650

Specifications

Specifications are subject to change without notice.

PANTOS CO. , LTD	Drawing number	Amendment
	M1650-00-0001	

1 . OUTLINE

Signal waveforms are displayed and recorded by a HU-1650 hyper UNICORDER. The unit as a paper recorder records signal waveforms on chart paper.

In recording these signal waveforms, it is possible to record even real-time signal waveforms, or to record even signal waveforms that were replayed after recorded once.

2 . SPECIFICATIONS

2 . 1 Main body specifications

Name	:	Pen recorder (Option)
Model	:	M-1650
Compliance program	:	P-1650
Channels	:	4, 8, 12, 16
Recording method	:	Automatic balancing recording system (digital servo system)
Recording pens	:	A felt-tip pen with life of approx.5km
Effective recording width	:	250mm
Pen interval	:	4mm
Pen name	:	NDL-**
Accuracy	:	± 0.1 % of (measurement accuracy + effective recording width) (including linearity and dead band) (Measuring accuracy : Refer to the specification of analog input unit.)
Pen speed	:	Max Approx.1200mm / sec
Synchronizer	:	ON, OFF 20date / 1mm
Measurement ON / OFF	:	Each channel individually.
Chart paper	:	Roll paper [No.25020P50 (50m)、 No.2501P50 (20m)]
Chart speed	:	40, 20, 10, 5, 2, 1 mm / sec / min, / h
Resolution of time axis	:	0.05mm
Sampling speed	:	Max 10ms
Rapid chart drive	:	2400mm / min (Reverse rotation not allowed)
Accuracy for chart drive	:	± 0.1 % (at a recording length over 1m)
Chart end detection	:	Provided (Pen up, CHART EMPTY is displayed.)
Swing-out protection	:	Signal Limiter
Superimposed marker	:	Operate by operation switch It is operated by external remote. Link with ON / OFF of synchronizer Amplitude : Approx.10mm ON time : Approx.50ms
Auto pen cap	:	Pen is automatically stored at the specified position on power OFF and measurement OFF.
Scaling	:	Range:-10000 to +10000 (Decimal point, Arbitrary setup, Arbitrary unit)
Pen lift	:	When a power supply is OFF, all pens are moved to pen rest. Total pen simultaneous specification • Measurement ON / OFF switch Measurement OFF → Pen up → Pen rest (Meanwhile, pens other than Measurement OFF rest.) Measurement ON → Pen up → It moves to the record position. → Pen down (Meanwhile, pens other than Measurement ON rest.)

2 . 2 General specifications

Withstanding voltage	:	AC1500V between Power supply and chassis (GND) (for 1min.)
Insulation resistance	:	More than 100MΩ between Power supply and Chassis (GND) (500VDC megger) More than 20MΩ between Control input / output and Chassis (GND) (250VDC megger)
Environment	:	Temperature 5 to 45 °C Humidity 35 to 80 % RH
Preservation environment	:	Temperature -5 to 50 °C Humidity 35 to 80 % RH
Vibration	:	5 to 50 Hz Less than 0.1G
Shock	:	Not approve
Power supply	:	AC90 to 265V 47 to 440Hz
Power consumption	:	Maximum 4pens, 90W typ. 8pens, 90W typ. 12pens, 90W typ. 16pens, 90W typ. At balanced 4pens, 40W typ. 8pens, 40W typ. 12pens, 40W typ. 16pens, 40W typ.
External dimensions	:	Approx. 438 (W) × 252 (H) × 420 (D) mm
Weight	:	4ch 13kg 8ch 13kg 12ch 13kg 16ch 13kg
Accessory	:	Power cord 1 Chart paper (20m) No.2501P50 1 Pen (Each color) NDL-** each 1 Fuse 250V 5A Time lag type 2 Supoido 1 USB cable (1m) 1 Earth adaptor 1 Manual 1

EXTERNAL VIEW

