YOKOGAWA

Recorder Migration Guide

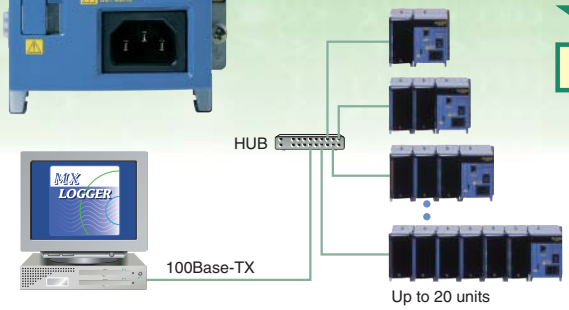
Introducing our New Models

Recorder and data acquisition products

Bulletin 04M03A03-02E

Multi Channel Module Type

MX100 PC-based Real Time Data Acquisition System



- Max. speed 10 ms (1 units), Max. 1200 ch/system
- 600 Vrms/VDC & 4 ch isolated

Data server

Ethernet (100Base-TX)

Main unit

MW100 Web-enabled Data Acquisition/ Data Logging System

- Max. speed 10 ms (1 units), Max. 360 ch/system
- Wide Operating Temperature Range (-20°C to +60 °C)

Input/Output Modules

DCV/TC/RTD/DI (High speed) (General purpose) | Ω/4W-E/DCV/DI | Strain (120Ω) (350Ω) (NDIS) | DI/5 V logic | 24 V logic | Pulse | DCV/TC/DI (Clamp terminal) (M3 Screw terminal) | AO (DCV/DCA) | A relay contact | PWM

Upgrade to

Data Acquisition Unit DA100

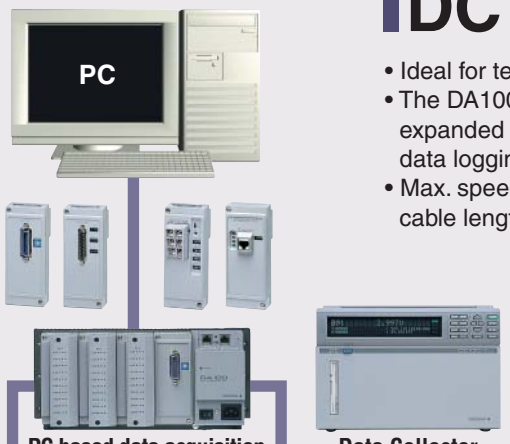
Data server

GP-IB
RS232C
RS422/485
Ethernet

Main unit

Dedicated cable

Sub unit



PC based data acquisition DA100

Data Collector DC100

Subunit DS600 (6-module connection type)

Subunit DS400 (4-module connection type)

Upgrade to

Data Collector DC100

- Ideal for test lab and process applications
- The DA100 or DC100 can be flexibly configured and expanded to meet a wide range of recording, small-scale data logging and multi-point data acquisition needs.
- Max. speed 500 ms, Max. 300 ch/system & 500 m total cable length

Desktop Type

Portable Paperless Recorder
MV1000/MV2000

The Portable recorder with evolutionary high reliability and ease-of-use !

- Internal memory: 200 MB
- Withstand voltage: 1000 VAC
- Input types: DCV, TC, RTD, DI, DCA
- Communication functions: Ethernet, RS232, RS422/485
- Measurement intervals: High-speed model (25 ms*)
  MV1000 : 4, 8 ch
  MV2000 : 8 ch
  Low-speed model (125 ms*)
  MV1000 : 6, 12, 24 ch
  MV2000 : 10, 20, 30, 40, 48 ch
- Multi-point input: MV1000 (Max. 24 ch)
  MV2000 (Max. 48 ch)

*High-speed mode

Hybrid Recorder
DR130/DR230

The DR130/DR230 recorders provides high reliability and performance over a wide range of environmental conditions.

- Input types: DCV, TC, RTD, DI, Power monitor, Pulse, Strain and direct current (mA) etc.
- Communication functions: RS232C, GP-IB, RS422/485, Ethernet
- Recording color: 10

<Stand-alone model: Measurement intervals: 2 s>
- Input channels: 10 to 30 ch

<Expandable model: Measurement intervals: 0.5 s>
- Input channels: Max. 300 ch

Upgrade to

HR2500 Recorder (From 1986 to 1998)


Decentralized data collection
- Measurement intervals: 2 s
- Number of inputs: 60 to 300 ch
- Recording color: 6

HR2300 Recorder (From 1989 to 1998)


The third-generation Hybrid Recorder
- High-breakdown-voltage solid-state relays
- 30 ch/1 s
- Recording color: 10

3081 Recorder (From 1985 to 1994)


The second-generation Hybrid Recorder
- 30 ch/6 s
- Recording color: 6

3088 Recorder (From 1982 to 1990)


Equipped with Microprocessor
- 30 ch/8 s
- Recording color: 6

HR1300 Recorder (From 1989 to 1998)


Portable Hybrid Recorder
- High-breakdown-voltage solid-state relays
- 20 ch/1 s
- Recording color: 10

3087 Recorder (From 1984 to 1994)


Portable Recorder
- Digital print function
- 12 ch/5 s
- The thermally sensitive resistor input can be specified.

3058 Multi-point Recorder (From 1985 to 1994)


Automatic Equilibrium Recorder
- Incorporated reference junction compensation circuit
- Pen model: 6 to 12 pens
- For continuous record temperature etc. for a long time

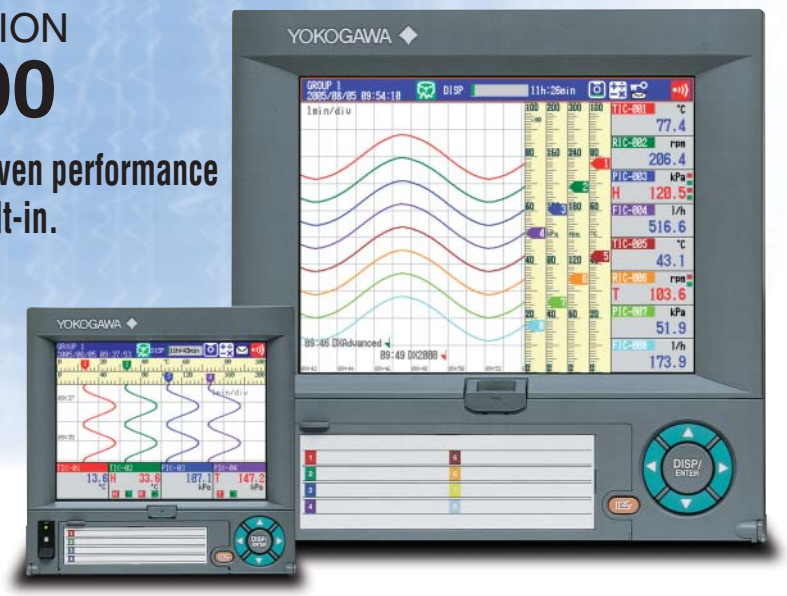
3057 Portable Pen Recorder (From 1979 to 2007)


Equipped with Microprocessor
- Three different power source models
- Pen model: 1 to 2 pens
- Mess-free, disposable Felt-tip pen recording

Panel Mount type

The next generation DAQSTATION
DX1000/DX2000

DXAdvanced is built on years of field-proven performance with Yokogawa quality and reliability built-in.



- Internal memory: 200 MB
- Withstand voltage: 1000 VAC
- Input types: DCV, TC, RTD, DI, DCA
- Communication functions: Ethernet, RS232, RS422/485
- Measurement intervals: High-speed model (25 ms*)
  DX1000 : 2, 4 ch
  DX2000 : 4, 8 ch
  Low-speed model (125 ms*)
  DX1000 : 6, 12 ch
  DX2000 : 10, 20, 30, 40, 48 ch
- Multi-point input: DX1000 (Max. 12 ch)
  DX2000 (Max. 48 ch)

*High-speed mode

Hybrid Recorder
DR240

The DR240 recorder provides high reliability and performance over a wide range of environmental conditions.

- Input types: DCV, TC, RTD, DI, Power monitor, Pulse, Strain and direct current (mA) etc.
- Communication functions: RS232C, GP-IB, RS422/485, Ethernet
- Recording color: 10

<Stand-alone model: Measurement Intervals: 2 s>
- Input channels: 10 to 30 ch

<Expandable model: Measurement Intervals: 0.5 s>
- Input channels: Max. 300 ch

Upgrade to

HR2500 Recorder (From 1986 to 1998)

Decentralized data collection
- Measurement intervals: 2 s
- Number of inputs: 60 to 300 ch
- Recording color: 6

HR2400 Recorder (From 1989 to 1998)

The third-generation Hybrid Recorder
- High-breakdown-voltage solid-state relays
- 30 ch/1 s
- Recording color: 10

4081 Recorder (From 1985 to 1994)

The second-generation Hybrid Recorder
- 30 ch/6 s
- Recording color: 6

4088 Recorder (From 1981 to 1990)

Equipped with Microprocessor
- 30 ch/8 s
- Recording color: 6

μR100F Recorder (From 1988 to 1995)

- Clear, distinct 4-color traces
- Pen model: 1 to 4 pens

μR100T/μR180T Recorder (From 1988 to 1995)

- Easy operation of analog sense
- Intelligent recorder
- Pen model: 1 to 3 pens
- Dot-printing model: 6 to 12 dots

μR100/μR180/μR250 Recorder (From 1985 to 1995)

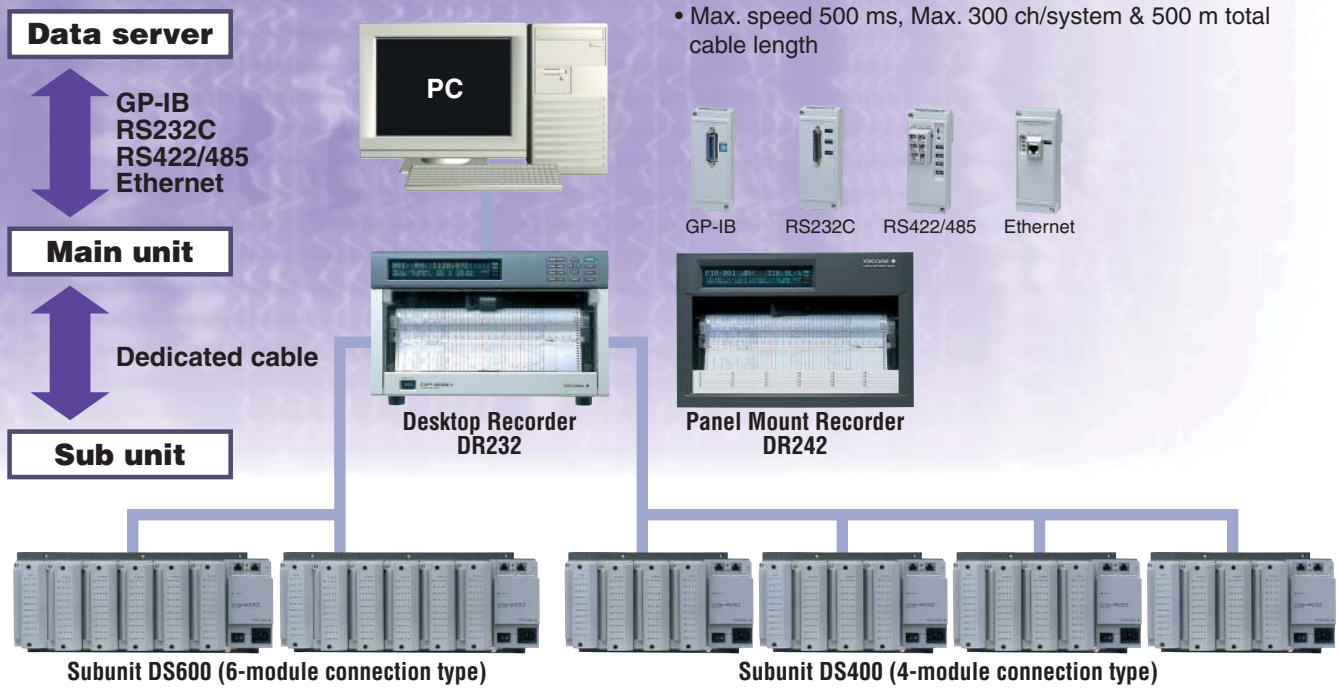
- Recorder equipped with ultrasonic pen position transducer
- Pen model: 1 to 3 pens
- Dot-printing model: 6 to 24 dots

ER100/ER180 Recorder (From 1975 to 1993)

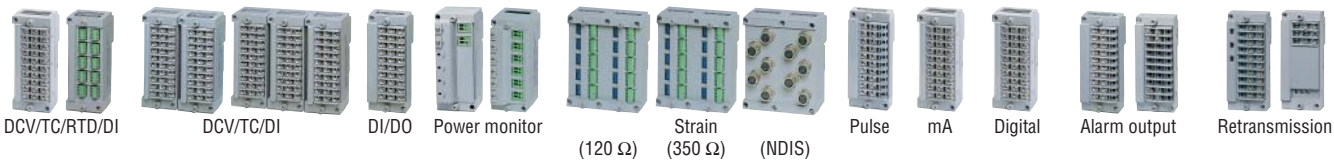
- Automatic equilibrium recorder
- Pen model: 1 to 3 pens
- Dot-printing model: 6 to 24 dots

Hybrid Recorder
DR232/DR242

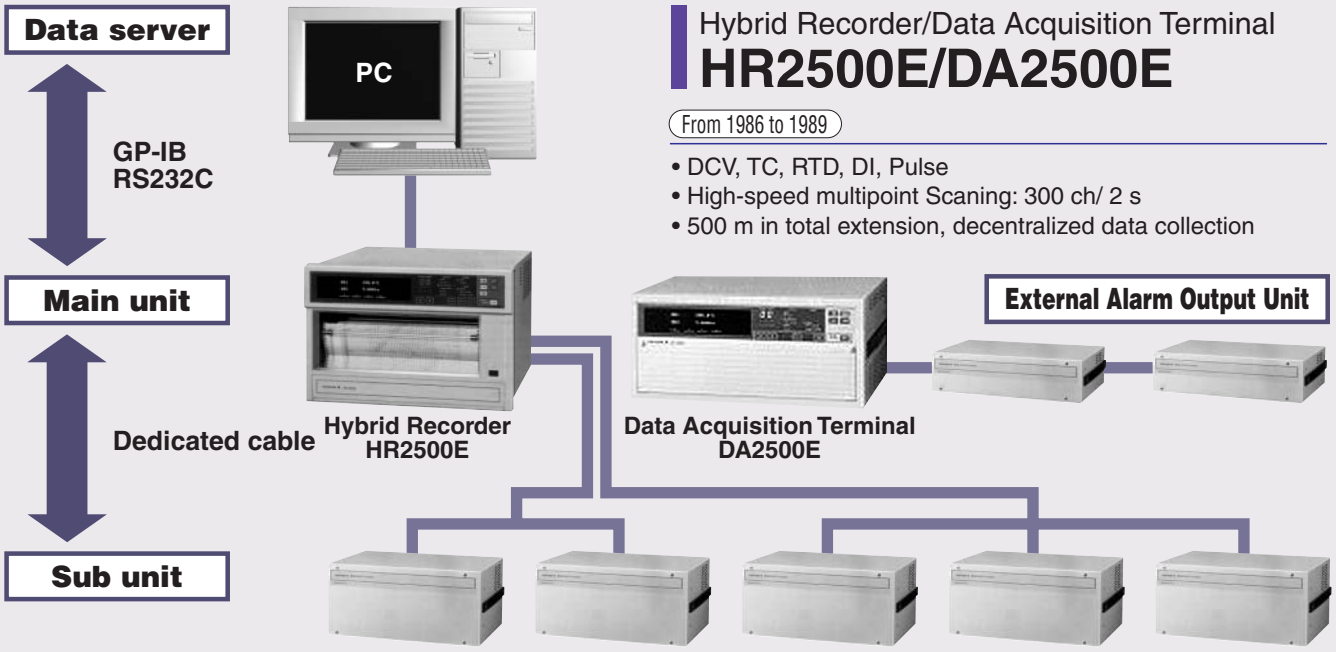
- Ideal for test and process needs, the DR series is a scalable, multi-point data acquisition system combining paper chart recording with powerful PC interface capabilities.
- Max. speed 500 ms, Max. 300 ch/system & 500 m total cable length



Input/Output Modules



Upgrade to



Hybrid Recorder/Data Acquisition Terminal
HR2500E/DA2500E

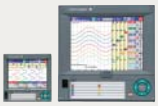
From 1986 to 1989

- DCV, TC, RTD, DI, Pulse
- High-speed multipoint Scaning: 300 ch/ 2 s
- 500 m in total extension, decentralized data collection

History of Panel Mount Recorders

Year

2005 The next generation DAQSTATION
DXAdvanced
DX1000/DX2000

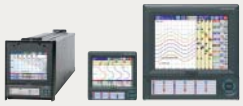


2004 The third-generation chart recorder
μR10000/μR20000

2001 Control and measurement station
CX1000/CX2000

Data acquision station for pharmaceutical model
DX100P/DX200P

1999 Data acquisition station
DX100/DX200



1997 Paperless recorder **VR200**

1995 The second-generation data acquisition equipment
DARWIN

1992 The second-generation chart recorder
μR1000/μR1800
μRS1000/μRS1800

1989 The third-generation high-breakdown-voltage solid-state relays hybrid recorder **HR2400**

1986 The first-generation data acquisition equipment
HR2500/DA2500

1985 The second-generation hybrid recorder equipped with microprocessor **4081**

The first-generation chart recorder equipped with microprocessor
μR100/μR180/μR250
μR100T/μR180T
μR100F

1981 The first-generation hybrid recorder equipped with microprocessor **4088**

1975 DIN size recorder
ER100/ER180

1961 Electronic automatic equilibrium recorder **ER**

History of Desktop Recorders

Year

2007 The next generation Potable paperless recorder
MVAdvanced
MV1000/MV2000

2005 Web-enabled data acquisition/ data logging system
MW100

2003 PC-based real time data acquisition system
MX100

1999 MobileCorder
MV100/MV200

1997 Handy oscillographic recorder
OR100/OR300

1995 The second-generation data acquisition equipment
DARWIN

1992 Recorder with built-in thermal printer **OR**

1989 The third-generation high-breakdown-voltage solid-state relays hybrid recorder **HR2300**
Portable hybrid recorder **HR1300**
Memory card logger **3820**

1988 Intelligent pen recorders
LR12000/LR8100/LR4100/LR4200

1986 The first-generation data acquisition equipment
HR2500/DA2500

1985 The second-generation hybrid recorder equipped with microprocessor **3081**

1984 The first-generation portable recorder **3087**

1982 The first-generation hybrid recorder equipped with microprocessor **3088**

1980 Multi-point recorder **3058**

1979 **1977** Analog pen recorder **3056/3057**

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