General Specifications

Model DSC2
Communication Interface Card

JUXTA

GS 77J05S31-01E

■ General

The DSC2 is a communication interface card that is used by installing to the dedicated slot of the nest for D series signal conditioners. It has a RS-485 communication port, for relaying communication data of the D series and Yokogawa Field Instruments to a host computer.

The communications protocol can be switched between "DSC2 upper-level communication protocol" and "BRAIN protocol".
Using the DSC2 upper-level communication protocol, the user can make an application program on PC to communicate with D series signal conditioners.

DSC2 constantly scans output values of the signal conditioner of each slot, and sends the data of 16 slots at once when read-out command comes from the host computer. (scanning time: within 1 second for the data of 16 slots)

A communication connector for handy terminals on the front panel enables the communication between JHT200 and a signal conditioner of any slot in the nest.

■ Model and Suffix Codes

DSC2

Model

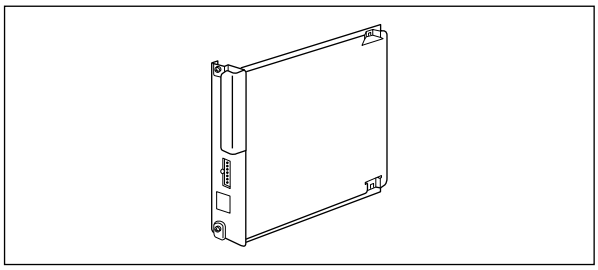
■ Ordering Information

Specify the following when ordering.

• Model and suffix codes: e.g. DSC2

■ Higher-level Communication

Interface: RS-485 compliant (*1)
Transmission system: 2-wire, half duplex
Synchronization: Asynchronous (start-stop)
Baud rate: 9600, 4800, 2400, 1200, 600 bps
(9600 bps for factory default)
Data format:
Start bit: 1 bit
Data code: 8 bits (fixed)
Parity bit: None, even, odd
("None" for factory default)
Stop bit: 1 bit (fixed)
Error check: Parity check
Sum check; simple addition (2 bytes)
Xon/Xoff control: None
Termination character: specified (CR1 character)
Maximum number of connectable devices:
15 nests
Maximum communication distance: 20 m (*1)
Communication protocol: BRAIN protocol
DSC2 upper-level communication protocol (*2)



*1 This RS-485 port is not isolated from chassis ground. Signal ground and chassis ground are at the same potential, and therefore, a transmission distance is limited to 20m.

*2 DSC2 upper-level communication protocol:
A character-based communication protocol, originated by Yokogawa to support the necessary functions for upper-level communication with the host computer.
(1) Accessing each communication item of signal conditioners.
(2) Communication frame format complies with the format of PC link module adopted to FA-M3, a programmable logic controller of Yokogawa.

■ Environmental Conditions

Operating temperature range: 0 to 50°C
Operating humidity range: 5 to 90% RH (no condensation)
Power supply voltage: 24 V DC±10% (ripple content 5% p-p or less)
Current consumption: 100 mA

■ Mounting and Dimensions

Mounting method: Nest-mounting (Signals and power supply are connected through back board and connector)
External dimensions: 95(H)×23.6(W)×112.6(D) mm
Weight: Approx. 190 g

■ Standard Accessories

Tag number label: 1

YOKOGAWA

Yokogawa Electric Corporation
2-9-32, Nakacho, Musashino-shi, Tokyo, 180-8750 Japan
Tel.: 81-422-52-7179 Fax.: 81-422-52-6619

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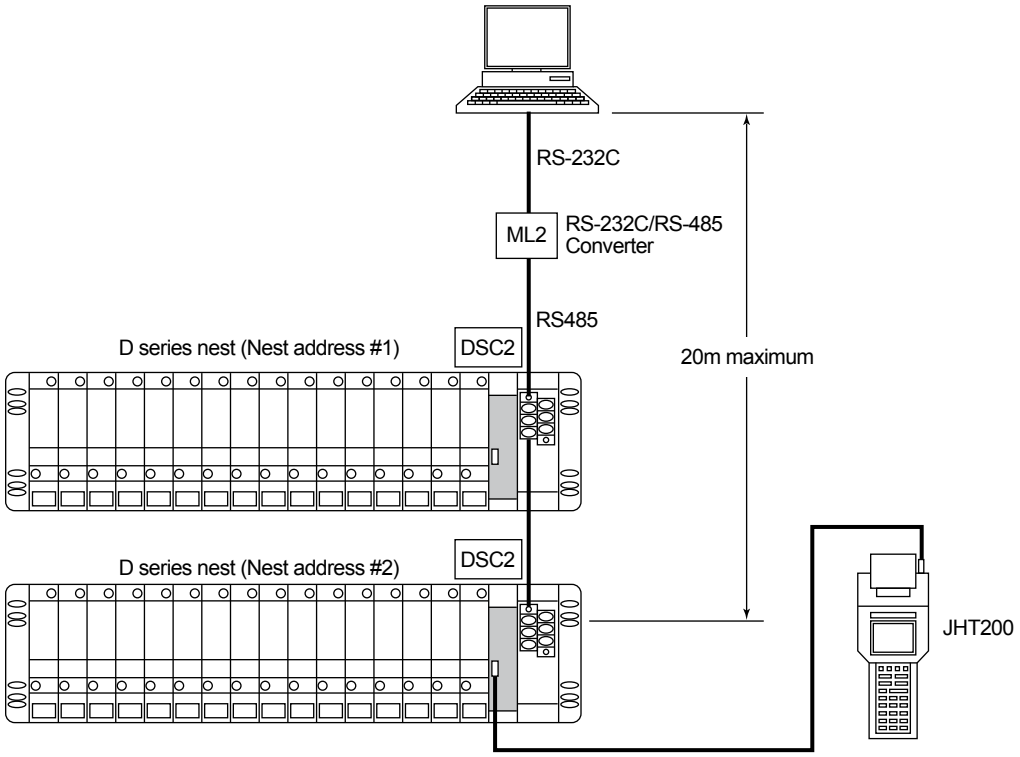
■ Connection Diagram Example



■ External Dimensions