

# General Specifications

## Model DSC2 Communication Interface Card

JUXTA

GS 77J05S31-01E

### ■ General

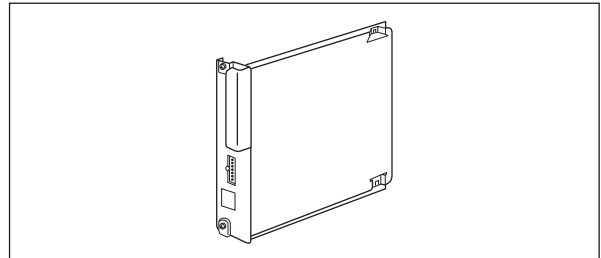
The DSC2 is a communication interface card that is used by installing to the dedicated slot of the nest for D series signal conditioners. It has a RS-485 communication port, for relaying communication data of the D series and Yokogawa Field Instruments to a host computer.

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.



- \*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.

### ■ Model and Suffix Codes

Model \_\_\_\_\_ **DSC2**

### ■ Ordering Information

Specify the following when ordering.

- Model and suffix codes: e.g. DSC2

### ■ Higher-level Communication

Interface: RS-485 compliant <sup>(\*)1</sup>  
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 <sup>(\*)1</sup>  
Communication protocol: BRAIN protocol  
DSC2 upper-level communication protocol <sup>(\*)2</sup>

### ■ 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

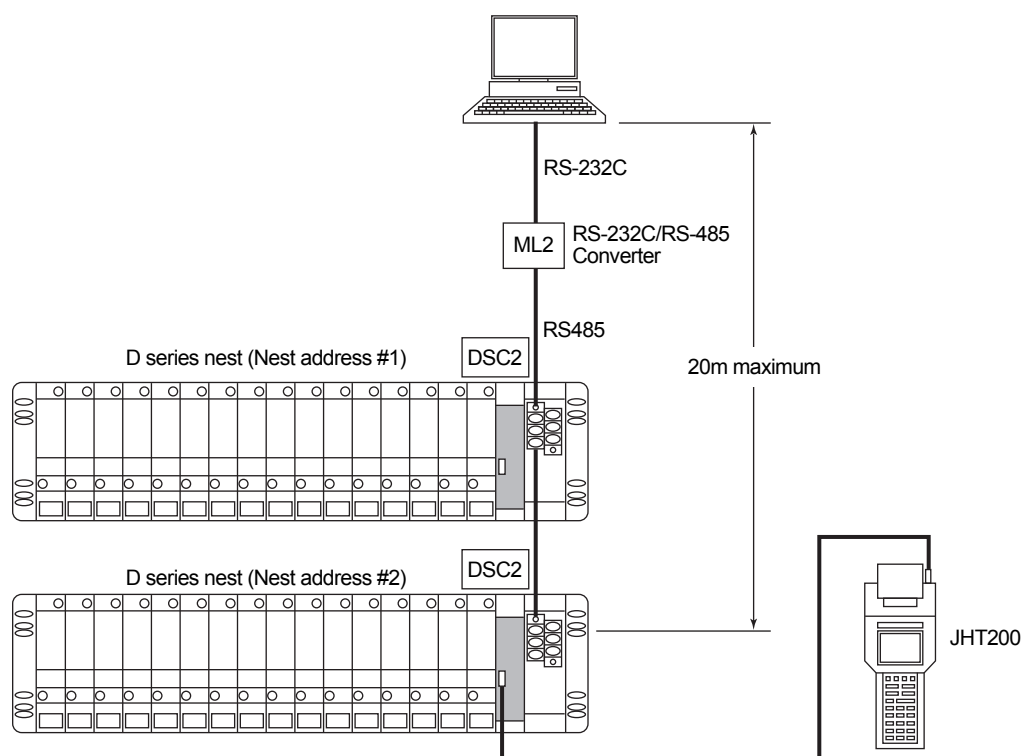
### ■ Mounting and Dimensions

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

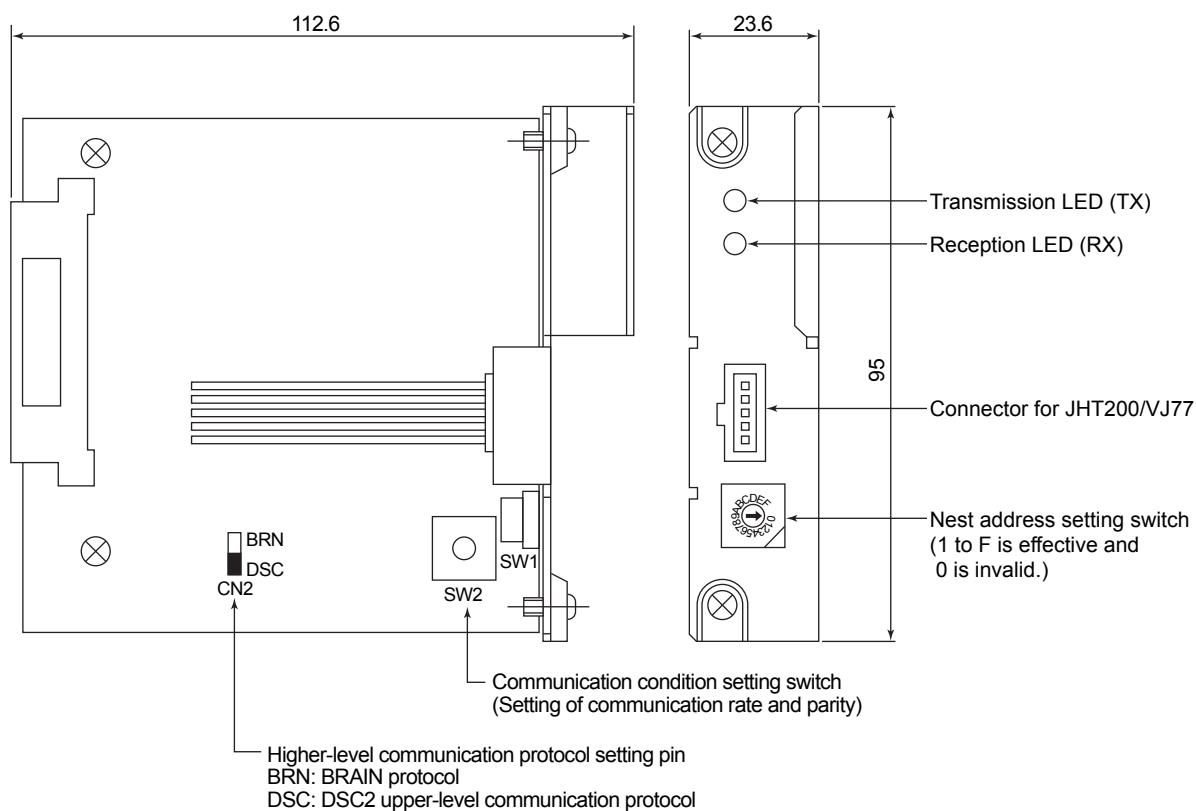
### ■ Standard Accessories

Tag number label: 1

## ■ Connection Diagram Example



## ■ External Dimensions



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## ■ Basic Conditions and Individual Contracts at the Time of Purchase

The warranty for this product is defined in the basic conditions and individual contracts at the time of purchase. The individual conditions are as follows.

- **Firmware warranty conditions**

The warranty conditions for the firmware installed in this products are same as that of the hardware.

- **Handling of non-conforming products**

If Yokogawa verifies a non-conformity of the product that is attributable to Yokogawa within the warranty period, we will deliver an equivalent product.

Yokogawa can not provide a free evaluation of non-conforming products. The investigation of the non-conforming products will be performed at the expense of the customer.