

Applicable Profibus-DP Network Supplementary Manual for FX2N-64DP-M Hardware Manual Revision A and B

This manual supplements FX2N-64DP-M Hardware Manual Revision A and B of the point of the applicable Profibus-DP network (subsection 1.3.1). There is further limitation, as explained in section 2 below.

1. Subsection 1.3.1 (From Hardware Manual)

- The maximum number of slaves that can be connected to a 64DP-M is 60.
- Number that can be connected for 1 segment
Masters + slaves + repeaters \leq 32 units
- Communications can be conducted via a maximum of 3 repeaters from an arbitrary master or arbitrary slave to an arbitrary master or arbitrary slave. However, the whole network can contain more than 3 repeaters. (See note above.)

2. Limitation

When using a slave with expansion diagnostic information of more than 32 bytes, the network will be limited.



Maximum expansion diagnostic information data length and number of connectable slave:

Maximum expansion diagnostic information data length is the smaller of value obtained from a slave address by the following equation or 244 bytes.

$$\begin{aligned} \text{Maximum expansion diagnostic information data length (bytes)} \\ = [12600 \div N^{*1} - 10] \text{ or } [244] \end{aligned}$$

*1 The value of N is the smaller of value obtained by the following equation or 300.

$$N = [(\text{Max. slave address value} - \text{Min. slave address value} + 1) \times 5] \text{ or } [300]$$



Note:

It is not possible to communicate normally with the slave when the maximum diagnosis information data length (Max_Diag_Data_Len) has been decided by the slave's GSD file is larger than the value obtained by the above expression.

In this case, please try the following things.

- 1) Make the slave address consecutive number if possible.
- 2) Change setting so that this value may become small if the maximum diagnosis information data length on the slave side can be set.
- 3) Reduce connected number of the slave.