SICK Distance Sensor vs. DeviceNet Master Products

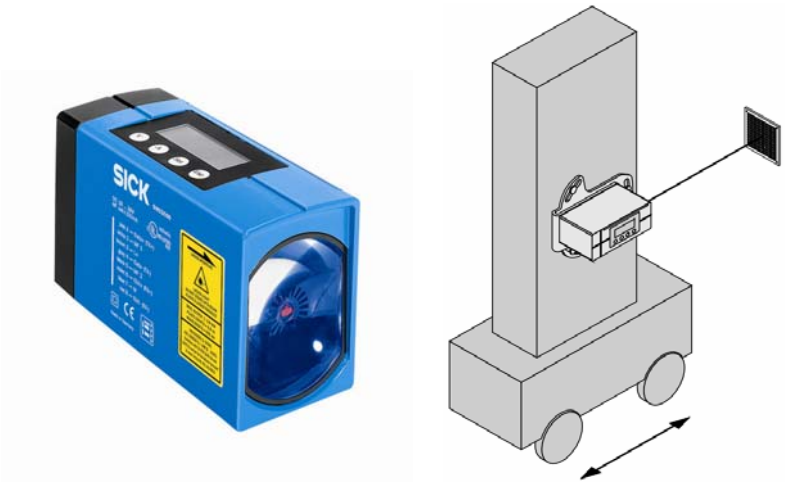
DeviceNet Master series:

DeviceNet Master series includes the USB interface(I-7565-DNM), PCI interface(PISO-DNM100U) and PAC module(I-8124W). They can represent an economic solution of DeviceNet application and be a DeviceNet master device on the DeviceNet network. They support Group 2 only Server and UCMM functions to communication with slave devices. They are popularly applied in the industrial automation, building automation, vehicle, marine, and embedded control network.

SICK Distance Sensor :

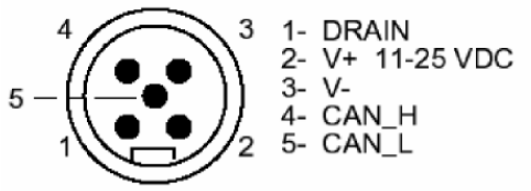
The distance measuring device DME5000 is a compact optical distance sensor. The DME is installed so that the emitted laser beam hits the reflector. The reflector or device move along the laser beam.

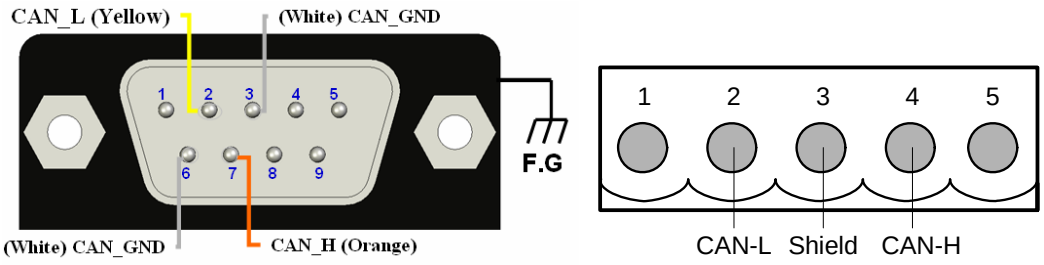
The DME receives the light reflected by the reflector and determines the distance between sensor and reflector by time of flight measurement.



The pictures came from the manual and are belonged to the SICK.

Wire connection with the DeviceNet Master:





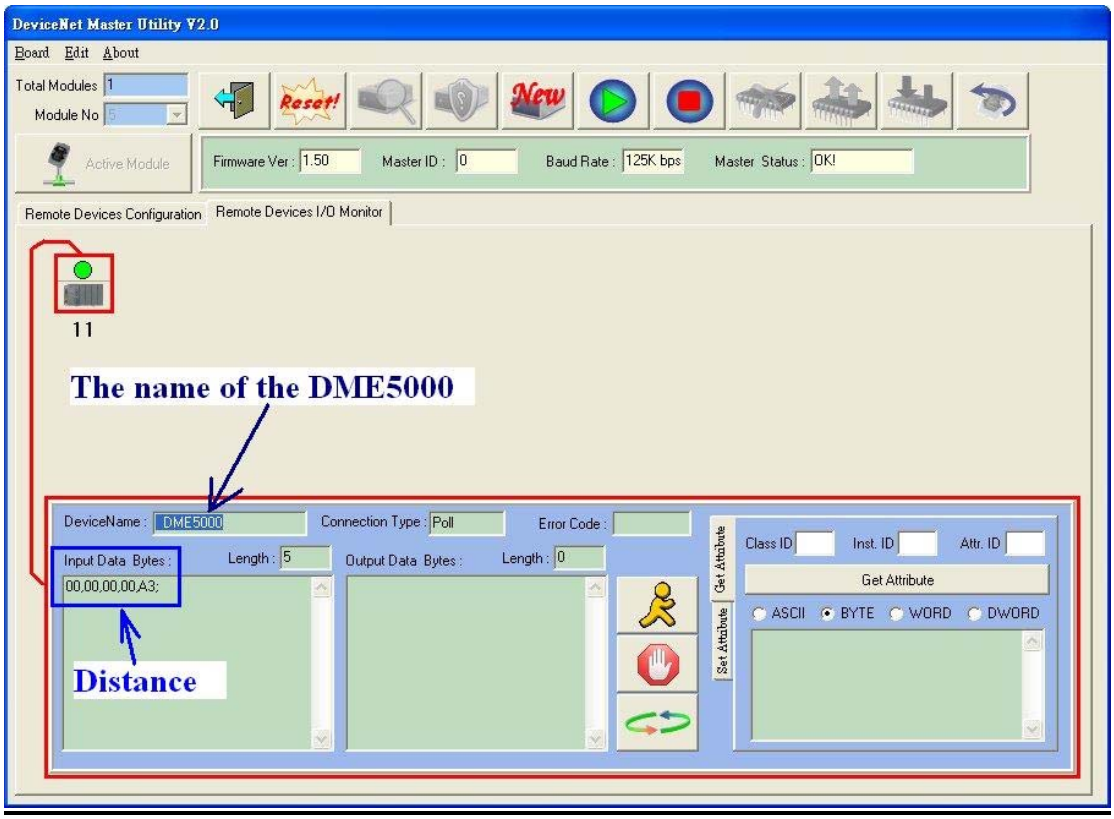
The users need to provide extra DC 24V power in M12-5PIN of the V+(pin-2) and V-(pin-3) for the DeviceNet module.

DNM Utility

The software utility includes various useful functions which help users to diagnose and access the DeviceNet devices. The users do not care about the protocol and configurations. The users could download from the website below.

ftp://ftp.icpdas.com.tw/pub/cd/fieldbus_cd/devicenet/master/dnm_utility/

The DNM Utility is communicating with the SICK DME5000 Sensor



The node #11(SICK DME5000) supports Poll connection. The Poll connection is with 5-byte input data which indicates the distance value.