DeviceNet Product

Omron's Industry First Wireless DeviceNet product allows users to connect to any DeviceNet compatible product. By using the 1 wireless &quotmaster&quot to &quotN&quot slaves, star and other topologies are possible by allowing a sub-network to extend an additional 500 meter distance in any direction. Multiple wireless masters can be placed on a single DeviceNet network, which makes multiple, flexible topologies available on the same system.
Wireless DeviceNet is ideal for difficult to access areas that require a lot of cable, therefore reducing expensive installation and wire costs. It combines three of the latest technologies in wireless communication &#151 spread spectrum, frequency hopping and antenna diversity. Its spread spectrum technology makes its signals harder to interfere with, allowing the message to get through the first time. With the frequency hopping feature, data is transmitted on various frequencies, allowing the message to get through even if there is interference. The wireless DeviceNet transceiver will shift to a nearby frequency to resend the message, preventing the receipt of an inaccurate message.
The antenna diversity feature in Wireless DeviceNet guarantees that for indoor applications, the &quotdirect line of sight&quot signal is the one detected, rather than a reflective signal that may lose key information. Wireless DeviceNet is the first wireless product in the industry to combine all three technologies. A potential system using Wireless DeviceNet could have 32 wireless masters each with 32 slaves for a possible 1,024 combination of sub-networks extending in the direction that suits the user's needs. Wireless DeviceNet also features a built-in security feature that prevents other users from changing the settings without knowing the codes. The setup procedure is a specific sequencing of switches that is not easily duplicated. Changing a switch setting will not alter the unit's configuration. Wireless DeviceNet is ideal for factory floor applications. Applications include material handling, conveyor systems, assembly lines, AGVs, and moving equipment where wiring is not practical.

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