



RAIN MASTER

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ETHERNET INTERFACE DEVICE

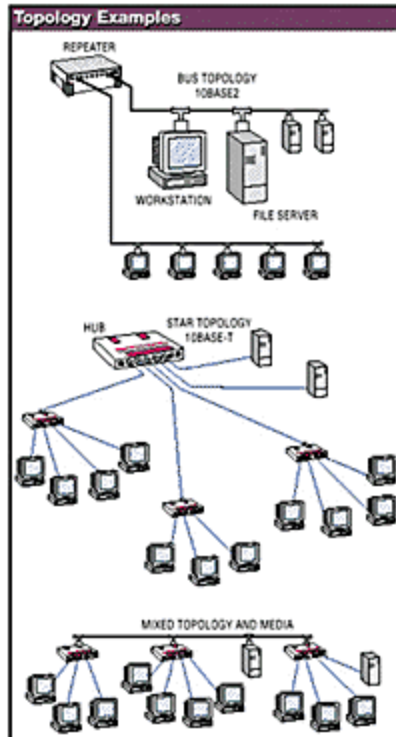
Rain Master's Ethernet Interface Device is an optional communication interface for the OASIS Central Control System. These devices allow connectivity between the OASIS Central Control Computer and Rain Master's DX2 irrigation satellite controllers, using existing network Ethernet cabling.

A network is any collection of independent computers or devices that communicate with one another over a shared network medium. Local Area Networks (LAN) are networks usually confined to a geographic area, such as a single building or a college campus. LANs can be small, linking as few as three devices, but often link hundreds of devices used by thousands of people. The development of standard networking protocols and media has resulted in worldwide proliferation of LANs throughout business and educational organizations.

Ethernet is the most popular physical layer LAN technology in use today. Ethernet is popular because it strikes a good balance between speed, cost and ease of installation. These benefits, combined with wide acceptance in the computer marketplace and the ability to support virtually all popular network protocols, make Ethernet an ideal networking technology for most computer users today.

Topologies

A network topology is the geometric arrangement of nodes and cable links in a LAN, and is used in two general configurations: bus and star. These two topologies define how nodes are connected to one another. A node is an active device connected to the network, such as a computer or a printer. A node can also be a piece of networking equipment such as a hub, switch or in this case the Rain Master's Ethernet Interface Device. A bus topology consists of nodes linked together in a series with each node connected to a long cable or bus. Many nodes can tap into the bus and begin communication with all other nodes on that cable segment. A break anywhere in the cable will usually cause the entire segment to be inoperable until the break is repaired.



On the next page are the specifications for the Rain Master's Ethernet Interface Device. Note the temperature limitations, the minimum specified operating temperature is 41° F and the maximum specified operating temperature is 122° F. Additionally; these devices are designed for the indoor environment and must be protected from moisture and foreign contaminants.

There are special installation requirements to be considered. The devices must be mounted in an indoor environment, all the necessary cabling is provided as a part of the kit. The maximum serial cable length from the Ethernet Interface Device to the controller is 100 feet. Rain Master does not warranty the Ethernet Interface Devices when used outside their specified operating parameters.

SPECIFICATIONS

Supported Protocols	ARP, UDP, TCP, Telnet, ICMP, SNMP, DHCP, TFTP, and HTTP
Device Support	Supports any asynchronous serial device with 7 or 8-bit data, with or without parity, requiring Ethernet access
Network Interface	RJ45 (10BASE-T) Ethernet
Serial Interface	Female DB25 RS-232/RS-422/RS485 serial port with DCE configuration
Data Rates	Serial speeds 300 bps up to 115 Kbps
Flow Control	Software XON/XOFF Hardware CTS/RTS
Modem Controls	RTS, CTS, DSR, DCD, DTR
Management	Internal HTTP server SNMP (read only) Serial login Telnet login
System Firmware	Flash ROM standard; downloadable from a TCP/IP host (TFTP) or over the serial port
LEDs	Good Link (green) Network transmit/Receive data (yellow) Collisions (red) Diagnostic (red) Status (green)
Physical Dimensions (H x W x D)	0.9 x 2.5 x 3.5 in (2.3 x 6.4 x 9.0 cm) Weight: 0.8 lbs (.35kg)
Shipping Dimensions (H x W x D)	4.5 x 9.5 x 7.5 in (11.5 x 24.2 x 19.1 cm) Weight: 3.0 lbs (1.5kg)
Power Requirements	External adapter included as 110 VAC (-01 models) or 230 VAC (-02 models) Required input power of 9-30VDC @ 250mA max.
Environmental	Operating Temperature 5 to 50°C (41 to 122°F) Storage Temperature -40 to 66°C (-40 to 151°F)
Agency Approvals	CE, FCC A, TUV, C/UL