



4 PORT INDUSTRIAL ETHERNET UNMANGED SWITCH

DDS SERIES



SYNOPSIS

- THE DDS 102-2F A SERIES INDUSTRIAL ETHERNET SWITCH IS ENGINEERED WITH A STORE-AND-FORWARD SWITCHING ARCHITECTURE, ENSURING RELIABLE DATA TRANSMISSION AND NETWORK INTEGRITY.
- IT FEATURES A FAN-LESS, ENERGY-EFFICIENT DESIGN, MAKING IT SUITABLE FOR CONTINUOUS OPERATION IN HARSH INDUSTRIAL ENVIRONMENTS.
- THE SWITCH SUPPORTS A WIDE INPUT VOLTAGE RANGE OF 12–58V DC WITH DUAL REDUNDANT POWER INPUTS, ENHANCING SYSTEM RELIABILITY.
- IT IS DESIGNED TO OPERATE EFFECTIVELY ACROSS AN EXTENDED TEMPERATURE RANGE OF -40°C TO +85°C, MEETING THE DEMANDS OF RUGGED INDUSTRIAL APPLICATIONS.

FEATURES

- COMPLIANT WITH IEEE 802.3 (10BASE-T) AND IEEE 802.3U (100BASE-TX) ETHERNET STANDARDS
- SUPPORTS AUTO-NEGOTIATION WITH 10/100 MBPS SPEEDS AND HALF/FULL-DUPLEX OPERATION ON ALL COPPER PORTS
- ENSURES DATA INTEGRITY THROUGH BACK PRESSURE FLOW CONTROL IN HALF-DUPLEX MODE AND IEEE 802.3X PAUSE FRAME CONTROL IN FULL-DUPLEX MODE
- FEATURES AUTOMATIC MAC ADDRESS LEARNING AND AGING FOR EFFICIENT NETWORK MANAGEMENT
- WIDE-RANGE 12–58V DC REDUNDANT POWER INPUT WITH INTEGRATED REVERSE POLARITY PROTECTION
- INGRESS PROTECTION: IP40
- ALUMINUM ALLOY ENCLOSURE FOR EFFICIENT THERMAL DISSIPATION
- FLEXIBLE INSTALLATION WITH DIN RAIL AND WALL-MOUNTING SUPPORT
- ENHANCED PROTECTION WITH 6KV SURGE IMMUNITY ON POWER AND ETHERNET PORTS
- ROBUST ESD PROTECTION WITH 8KV CONTACT AND 15KV AIR DISCHARGE IMMUNITY
- OPTIMIZED LOW POWER CONSUMPTION FOR ENERGY-EFFICIENT OPERATION

TECHNICAL SPECIFICATIONS

INTERFACE

Copper Port	2* 10/100M Auto-negotiation, RJ45 Auto-Cross for MDI/MDIX Cat5/Cat5e/Cat6, ≤100m
Fiber Port	2 * Fiber Port, SM, SC, 20Km
LED Indicator	Power, Link/Act, Speed

PERFORMANCE

Standard	IEEE802.3, IEEE802.3u, IEEE802.3x
Processing type	Store and forward
Switch Capacity	1.2Gbps non-blocking
Packet forwarding Rate	0.89Mpps
MAC address	2Kbit
Buffer Space	768Kbit
Max. packet length	2048bits

POWER

Power Input	12 to 58V DC
Power Consumption	<5W
Power connector	Terminal Block

MECHANICAL

Dimension	138x107x45mm
Installation	DIN-rail (default) Wall-mounted, Rack-mounted (Optional kits)
Housing	IP40
Enclosure	Aluminum Alloy

ENVIRONMENT

Operating temperature	-40 to 85°C
Storage temperature	-40 to 85°C
Relative humidity	5% to 95% (no condensing)

APPROVALS TESTED FOR

EN 61000-3-2	Harmonic current emissions: Class A
EN 61000-3-3	Voltage fluctuations and flicker: Class A
EN 61000-4-2	ESD: Level 4
EN 61000-4-3	RS: Level 4
EN 61000-4-4	EFT: Level 4
EN 61000-4-5	Surge Protection
EN 61000-4-6	RFT: Level 3,
EN 61000-4-8	Magnetic field immunity testing: Level 4 30A/m
EN 61000-11	Voltage dip/interruption
IEC 60068-2-6	Vibration
IEC 60068-2-27	Shock
IEC 60068-2-32	Free Fall
ROHS 2.0	RoHS

ORDERING CODE

DDS 102-2F M/SXXX SC/ST A

DDS	Industrial Ethernet Unmanaged Switch
102	2* 10/100M RJ45
2F	2 * Fiber Port,
M/SXXX	M : Multimode S020 : Single Mode 20Km S040: Single Mode 40Km S080 : Single Mode 80Km
SC/ST	SC: SC Connector ST: ST Connector
A	Fixed