KSwitch D10 MMT Series

Kontron TSN Ethernet KSwitch D10 MMT Series

❯ Managed Time Sensitive Networking (TSN) Ethernet switch

❯ 8-port switch with 6x 1000/100/10 and 2x 2500/1000/100/10Base-T

❯ Option with 2x SFP ports for 2.5G fiber and copper transceivers

❯ Dual redundant 12 VDC to 56 VDC input

❯ Industrial grade, highly reliable and long-term available
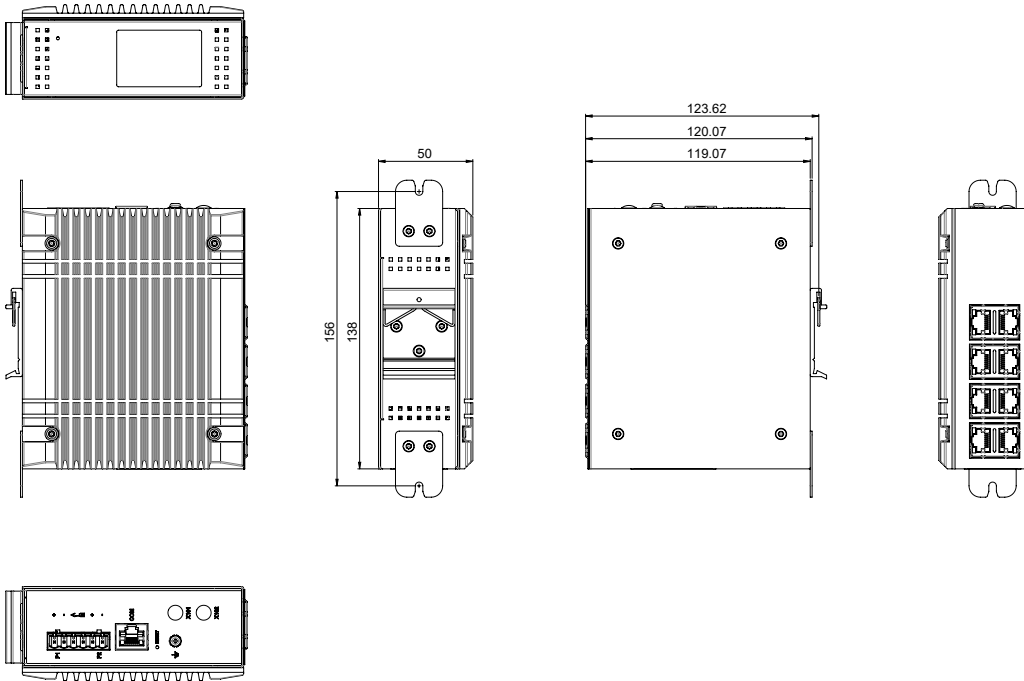
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The Power of IoT

The Kontron KSwitch D10 MMT series offers cost-effective web-managed industrial TSN switches with 8 Gigabit Ethernet ports providing easy to use plug-n-play connectivity. Copper and fiber optics ports are available. Due to the standard compliance, the KSwitch D10 MMT series can easily be integrated in factory production lines, embedded into a machine control system or applied for any network expansion. It is the perfect solution for state-of-the-art TSN applications and edge site installation.
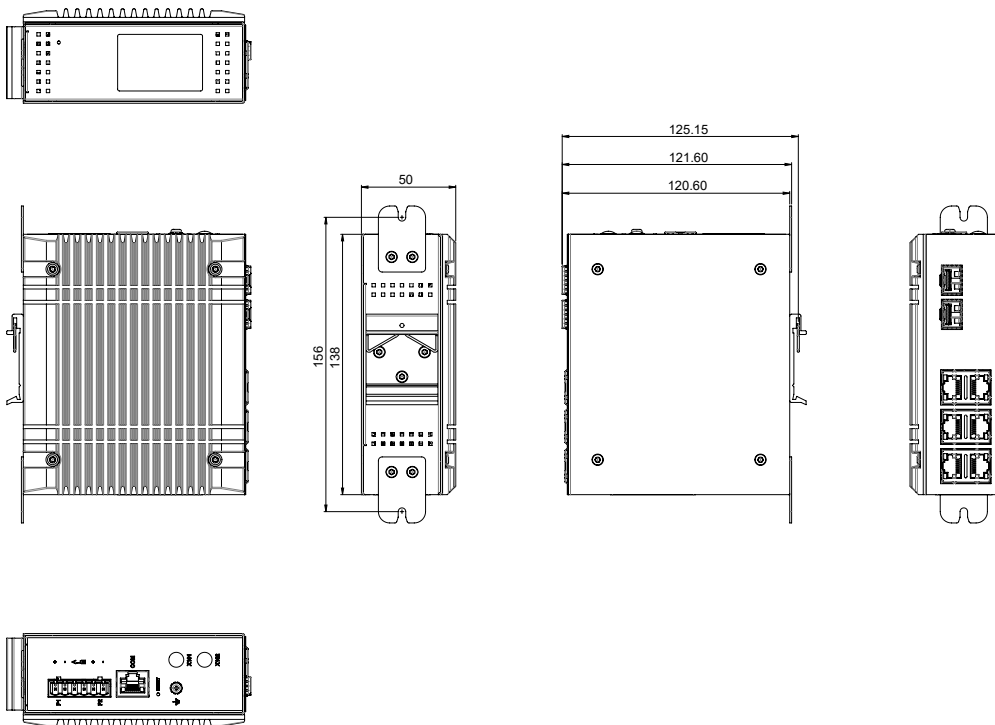
Technical Information

NETWORK	OPERATING MODE	Store and forward, full wire-speed/non-blocking Gigabit switchcore
RJ45 COPPER PORTS	SPEED	6x 10/100/1000Mbps RJ45 ports + 2x 10/100/1000/2500Mbps (for copper version)
	MDI/MDIX AUTOCROSSOVER AUTO-NEGOTIATION/DUPLEX	Support straight or cross wired cables 10/100/1000/2500 Mbps copper speed autonegotiation, full and half duplex Ultra low latency between ports 1G 5 und 1G 6
FIBER PORTS	PORT TYPES SUPPORTED OPTIMAL FIBER CABLE	Up to 2x 1000/2500 Mbps SFP Slots Typical 50 or 62.5/125 µm for multimode (mm) Typical 8 or 9/125 µm for single mode (sm) DAC cable support
PROTOCOL & STANDARDS		IEEE 802.1AS, 802.1Qci, 802.1Qav, 802.1Qbv, 802.1Qbu & 802.3br, 802.1CB (FRER), IEEE 802.1D/w, IEEE 802.1Q/p, IEEE 802.1ab, IEEE 802.1X, 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x, IEEE 802.3ad LLDP, IPv4/IPv6, SNMP v1/v2c/, TFTP, ARP, RARP, Telnet, Syslog, Flow Control, Back Pressure, ICMP, UPD, TCP Time: "IEEE1588-2008"
NETWORK REDUNDANCY	SPANNING TREE PROTOCOL PORT TRUNK / LACP RING TOPOLOGIES	IEEE 802.1D/1w/1S, STP/RSTP/MSTP Static trunk or LACP (Link Aggregation Control Protocol) G.8032, MRP IEC-62439-2 2016
BRIDGE, VLANS, PROTOCOLS	FLOW CONTROL MAX VLANS VLAN TYPES MULTICAST PROTOCOLS LLDP	IEEE 802.3x (full duplex) and back-pressure (half duplex) 4095 Port-based VLAN, IEEE 802.1Q tag-based VLAN IGMP v1, v2, up to 255 multicast groups IGMP snooping, querying IEEE 802.1ab LLDP
TRAFFIC MANAGEMENT & QOS	PRIORITY NUMBER OF QUEUES PER PORT SCHEDULING SCHEMES	IEEE 802.1p QoS 8 Strict Priority Queuing (SPQ), Deficit-Weighted Round Robin Queuing (DWRR)
SECURITY	PORT SECURITY STORM CONTROL	IP and MAC-based Access Control/Filter, Auth User / Privilege Level Control, IEEE802.1X Multicast / Broadcast / Flooding Storm Control / Port Access Control / Limiters
MANAGEMENT	USER MANAGEMENT INTERFACES MANAGEMENT SECURITY UPGRADE & RESTORE DIAGNOSTIC DHCP NTP CLIENT SYSTEM STATUS GREEN ETHERNET	Web-based management, Command Line Interface SNMP V1, V2c, Trap, Telnet (5 sessions) HTTPs, SSH, Access Management, Loop Protection TFTP/HTTP for Configuration Import / Export TFTP/HTTP for firmware upgrade Syslog, Level Info / Warning / Error Port Mirror, Per VLAN mirroring, CPU Load Monitor, Traffic Counter ICMP Ping Traceroute Client Mode, Server Mode, Relay Mode, Snooping yes Device info/status; Ethernet port status Port power savings
POWER	POWER INPUT INPUT VOLTAGE RANGE REVERSE POWER PROTECTION POWER CONSUMPTION	Redundant power input, removable terminal block 12-56 VDC yes 10 W max.
INDICATORS	POWER STATUS INDICATION ETHERNET PORT INDICATION RELAY OUTPUT	Power input status Link & speed 1 A, 24 V, Normal close
ENVIRONMENTAL & COMPLIANCE	OPERATING TEMPERATURE STORAGE TEMPERATURE HUMIDITY EMC SAFETY ROHS & WEEE MTBF PROTECTION ALTITUDE	-40 °C ~ 70 °C (cold startup at -40 °C) -40 °C ~ 85 °C 5 ~ 93 % (non-condensing @40 °C) EN 55032, EN 55035, EN 61000-6-2:2005, EN 61000-6-4, FCC EN 62368-1; designed to meet UL RoHS (Pb free), REACH and WEEE compliant >85000 h @ 30 °C ground benign (according to MIL-HDBK-217) IP30 3000 m
MECHANICAL	DIMENSION (H x D x W) WEIGHT INSTALLATION	140 x 125 x 50 mm approx. 350 g DIN-Rail mounting, wall mounting

Mechanical Drawing

D10 MMT 8-port series with RJ45

D10 MMT 8-port series with SFP

Ordering Information

KSwitch D10 MMT Switch Series

ARTICLE	DESCRIPTION	Copper Ports	Fiber Ports
Standard configurations			
KSWITCH D10 MMT 8G	Industrial 8-port managed TSN Ethernet switch with 6 10/100/1000 BaseT(X), 2 10/100/1000/2500 BaseT(X), -40 °C to 75 °C of operating temperature, dual DC power input 12 V to 56 V	8	
KSWITCH D10 MMT 6G-2GS	Industrial 8-port managed TSN Ethernet switch with 6 10/100/1000 BaseT(X) and 2 100/1000/2500 FX SFP Slot, -40 °C to 75 °C of operating temperature, dual DC power input 12 V to 56 V	6	2

On request

DPLL OPTION	for ITU G.8275.1 and ITU 8265.1 support		
KSWITCH D10 MMT 6G	Industrial 6-port managed TSN Ethernet switch with 6 10/100/1000 BaseT(X), -40 °C to 75 °C of operating temperature, dual DC power input 12V to 56V	6	
PoE SUPPORT	Please ask		
PACKAGE CONTENTS	KSwitch D10 MMT switch, DIN-Rail mounting kit		

Accessories

SFP MODULES	on request
230 V AC TO DC POWER ADAPTER	Order code 1057-7077

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