**KY-MPG2404 / DYMEC GP Series**

**24+4 Port Managed PoE+ Ruggedized, Temperature Hardened, Gigabit, Industrial Ethernet Switch**



|  |  |
| --- | --- |
|  | * 24 x Gigabit Ethernet Ports * 4 x 1000 SFP Slots * Protection – IP30 / Fanless Convection Cooled * **NSA Network Endpoint Guideline Certified for Console Port Shutdown and Chassis Full Security (Patent Pending)** * Built for harsh environments and wide temperature range application * RSTP, MSTP, ERPS, LACP for Network Redundancy * QoS CoS/DSCP to increase determinism * Supports IGMP Snooping v1/v2/v3, up to 1024 groups * DHCP Relay Option 82 for policies IP address * 30-Watt Power over Ethernet * SNMP v1/v2c/v3 for network management * Supports Broadcast Storm Protection * USB storage for configuration-free replacement * Support industrial automation protocols Ethernet/IP and Modbus TCP * ERPS: Ethernet Ring Protection System with DDMI * Secure File Transfer Protocol (SFTP) & Trivial File Transfer Protocol (TFTP) * Supports PoE PD Alive Check Functionality for PoE Device Power Recycle   A close up of a sign  Description generated with very high confidence |
| A close up of a sign  Description automatically generated |
|  | |
| **Specifications** | |

|  |  |
| --- | --- |
| **Technology** | |
| **Standards** | IEEE 802.3 10BaseT  IEEE 802.3u 100BaseTX  IEEE 802.3ab 1000BaseT  IEEE 802.3z 1000BaseX  IEEE 802.3x Flow Control  IEEE 802.3af Power over Ethernet  IEEE 802.3at PoE+  IEEE 802.3ad/802.1AX LACP  IEEE 802.1D Spanning Tree Protocol  IEEE 802.1w Rapid STP  IEEE 802.1s Multiple STP  ITU-T G.8032 / Y.1344 ERPS  IEEE 802.1Q VLAN Tagging  IEEE 802.1ad Stacked VLANs  IEEE 802.1p Class of Service  IEEE 802.1X Network Authentication  IEEE 802.1AB LLDP |
| **Processing Type** | Store and Forward |
| **Switch Properties** | |
| **Priority Queues** | 8 Queues |
| **Jumbo Frame** | 16000bytes |
| **MAC Table Size** | 16K |
| **VLAN Table Size** | 4094 |
| **IGMP Group** | 1024 |
| **Packet Buffer** | 12Mbits |
| **Software Features** | |
| **Network Redundancy** | RSTP, MSTP, G.8032 ERPSv2, Port Trunking with LACP |
| **Security** | 802.1X, RADIUS, TACACS+, SSL, SSH |
| **Management** | IPv4, IPv6, Web, Telnet, Serial Console, CLI, SNMP v1/v2c/v3, uPnP |
| **Diagnostics** | RMON, SNMP Inform/Trap, Syslog, SMTP, Port Mirroring, LLDP |
| **Configuration** | DHCP Server/Client, Relay Option 82, TFTP, USB |
| **Filter** | 802.1Q VLAN, Q-in-Q, IGMP Snooping v1/v2/v3, IGMP Querier, Independent Vlan Learning |
| **Time Sync.** | NTP |
| **QoS** | CoS, DSCP, WRR/SPQ Queuing, Storm Protection |
| **PoE** | Powering Status, PoE Monitoring, Scheduling, PD Alive Check |
| **Industrial Profiles** | Ethernet/IP, Modbus TCP |
| **Interfaces** | |
| **RJ45 Port** | 24x 10/100/1000T(x)auto negotiation speed duplex mode, auto MDI/MDI-X |
| **Fiber Port** | 4x 1000 SFP Slot |
| **PoE Pin Out** | V+, V+, V-, V-, for pin 1, 2, 3, 6, End span, MDI Mode A |
| **LED Indicators** | **Per unit:** PWR1, PWR2, Fault, Ring Master, Ring State  **Ports:** Link/Active with highest speed(Green), low speed(Amber)  **PoE:** Output Power |
| **Alarm Contact** | 1 x relay output with current carrying capacity of 1A @ 24 VDC |
| **Digital Inputs** | 1 x isolated input from the electronics.  +13 to +30 Volts for state "1"  -30 to +3 Volts for state "0"  Max. input current: 8mA |
| **Button** | Multiple function reset button |
| **Serial Console** | 1 x RS232 in RJ45 connector with console cable, 115.2Kbps, 8N1 |
| **Storage** | 1 x USB 2.0 storage for firmware update, configuration backup, restore, boot up and syslog |
| **Power Requirements** | |
| **Operation Voltage** | 90~264 Volts AC, 48~57 Volts DC, redundant dual inputs |
| **Connection** | AC socket, DC 4-pin terminal block |
| **Power Consumption** | 26 Watts without PDs' consumption |
| **PoE Power Budget** | Max. 450W@AC or 720W@DC, for total PD consumption, Max. 30 W per PoE port |
| **Protection** | Overload Current Protected, Reverse Polarity Protected |
| **Mechanical Construction** | |
| **Enclosure** | Aluminum / Steel Military Grade |
| **Protection Class** | IP30 |
| **Dimensions** | 440 x 44 x 331 mm (W x H x D) |
| **Weight** | 6.00 kg |
| **Mounting** | 19” Rack Mounting |
| **Environmental Limits** | |
| **Operating Temperature** | Extended: -40°C ~ 80°C (-40°F ~ 176°F) |
| **Storage Temperature** | -40°C ~ 85°C (-40°F ~ 185°F) |
| **Ambient Relative Humidity** | 5 to 95%, (Non-Condensing) |
| **Regulatory Approvals** | |
| **Altitude – GB4943.1-2011** | Certified: 0 ~ 5000 Meters |
| **EMI** | FCC Part 15 Subpart B Class A  CE EN 55032 Class A |
| **EMS** | IEC61000-4-2 (ESD)  IEC61000-4-3 (RS)  IEC61000-4-4 (EFT)  IEC61000-4-5 (Surge)  IEC61000-4-6 (CS)  IEC61000-4-8 (Magnetic Field) |
| **Free Fall** | IEC60068-2-32 |
| **Shock** | IEC60068-2-27 |
| **Vibration** | IEC60068-2-6 |
| **Green** | RoHS Compliant |
| **Certifications** | UL 60950-1/62368 (Pending)  61000-6-2 / ITUT / FCC  61000-6-4 / NEMA TS2 / IEEE / CE |
| **MTBF**  **MIL-HDBK-217**  **IEC 62380** | >147,000 hours |
| **Warranty**  **TAA Compliant** | **5 Years / Limited Lifetime**  **Certified TAA Compliant** |

|  |
| --- |
| **In a continuing effort of improvement and updated technology, product specifications are subject to change without notice.** |
|  |
| **Dimensions (unit = mm)** |
|  |

|  |  |
| --- | --- |
|  | |
| **DYMEC Ordering Information** | |
| **KY-MPG2404-AC**  **DYMEC GP**  **Series** | 24 + 4 Port Industrial Managed PoE+ Gigabit Ethernet Switch  - 24 x 10/100/1000T(x) with 30 Watts PSE + 4 x 1000 SFP Slots  - Operating Temperature: -40°C ~ 80°C (-40°F ~ 176°F)  - 1 x AC Power Input  **NSA Guideline Certified for Console Port Shutdown and Chassis Full Security** |
| **KY-MPG2404-AD**  **DYMEC GP**  **Series** | 24 + 4 Port Industrial Managed PoE+ Gigabit Ethernet Switch  - 24 x 10/100/1000T(x) with 30 Watts PSE + 4 x 1000 SFP Slots  - Operating Temperature: -40°C ~ 80°C (-40°F ~ 176°F)  - 1 x AC Power and 1 x DC Power Input  **NSA Guideline Certified for Console Port Shutdown and Chassis Full Security** |
| **KY-MPG2404-DC**  **DYMEC GP**  **Series** | 24 + 4 Port Industrial Managed PoE+ Gigabit Ethernet Switch  - 24 x 10/100/1000T(x) with 30 Watts PSE + 4 x 1000 SFP Slots  - Operating Temperature: -40°C ~ 80°C (-40°F ~ 176°F)  - 2 x DC Robust Isolation Power Inputs  **NSA Guideline Certified for Console Port Shutdown and Chassis Full Security** |



**DYMEC – Temperature Hardened, American Made, Ruggedized, NSA Certified Endpoint, Industrial Ethernet Switches / Routers for SCADA, ITS, Transportation, Automation, Power Utilities, Edge Computing, AI and Industrial Control Systems. Made in USA. Cyber-Secure.**

**A close up of a sign

Description automatically generated**