



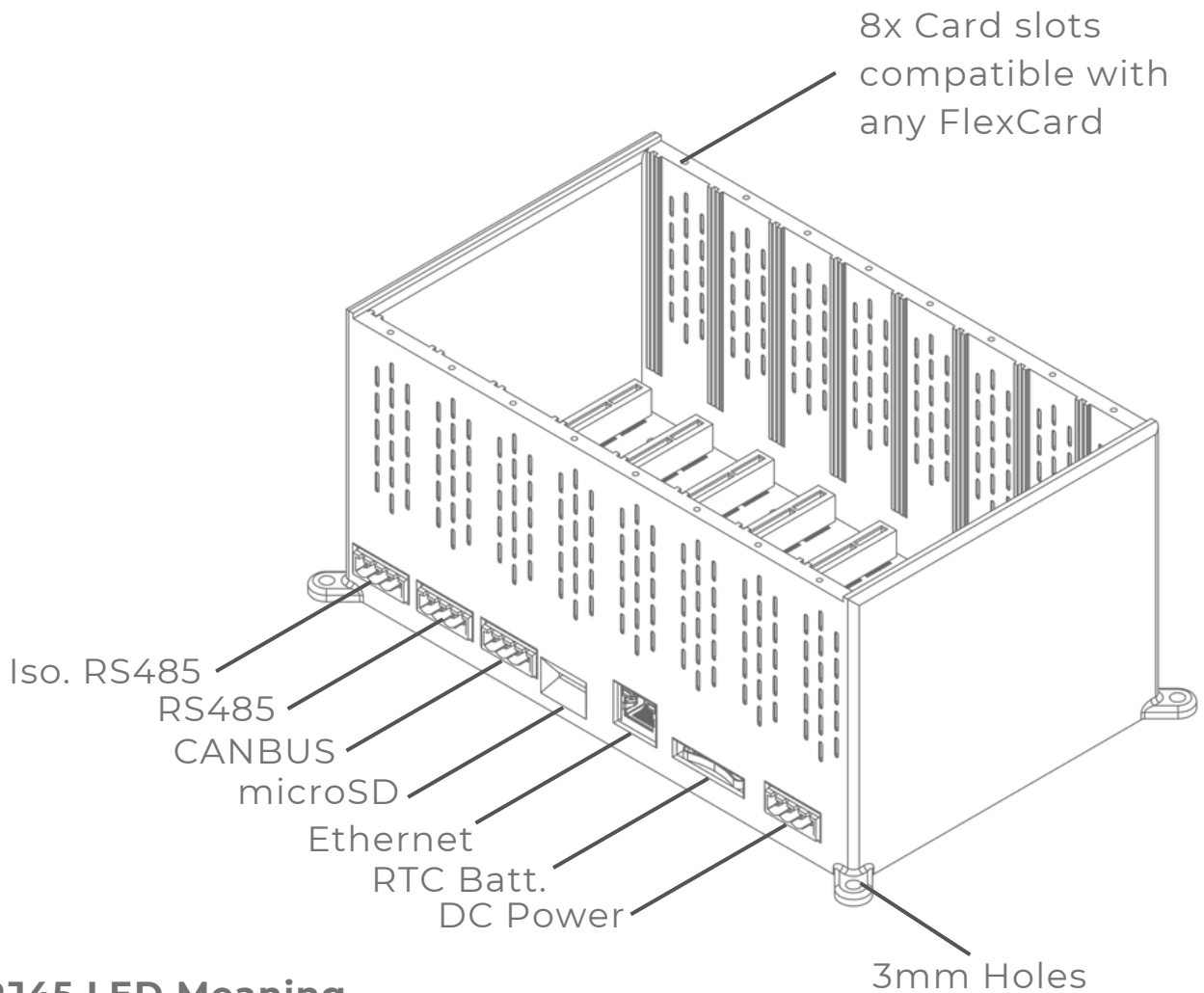
FlexsQ5M



FLEXIBLE. PROCESS. CONTROL

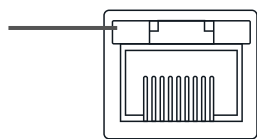
Rev 1.0





RJ45 LED Meaning

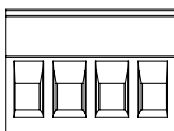
Orange LED on: link established 10/100 Mbps



Ethernet

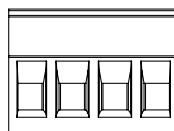
RS485 PINOUT

Gnd A B Gnd



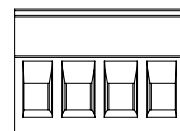
CANBUS PINOUT

Gnd L H Gnd



POWER PINOUT

+ + - -



9-30v DC

FEATURES

DESIGN / MANUFACTURE / SUPPORT

100% Designed, Manufactured and Supported in B.C. Canada
Software Development is also completely Canadian



ETHERNET

1 x LAN ports, 10/100 Mbps supports auto MDI/MDIX crossover

IEEE 802.3 series standards IEEE 802.3u, 802.3az

SERVICES

HTTP/HTTPS: Server, Client w/ JSON Support (HTTPS requires cert setup)

MODBUS: Dual-RS485, TCP/IP, Master, Slave

SNMP - Yes

MQTT - Yes

EtherIP: Yes - Basic Support

NETWORK

IPv4: Static, DHCP w/ fallback. Default: 192.168.1.20

IPv6: Static, SLACC, DHCPv6

Protocols: UDP, TCP

SYSTEM CHARACTERISTICS

CPU: STMicroelectronics STM32H743, ECC SRAM: 1MB FLASH: 2MB

Expandable File Storage via microSD

OPERATING SYSTEM / CUSTOMISATION

Operating System: Bare Metal OS based on FreeRTOS

Custom Scripting: Javascript ES6 Syntax Compiled to Bytecode

POWER

Input Voltage Range: 9-30V DC

Power Consumption: 0.5W (See FlexCard Datasheet for power usage)

Connector: 4-pin Industrial DC Power Connector

PHYSICAL INTERFACES

Ethernet: 1x RJ45 port, 10/100Mbps

RS485: 1x Isolated 4-pin Connector, 1x non-Isolated 4-pin connector

CANBUS: 1x 4-pin Connector

microSD: Standard Micro SD Slot

RTC Battery: Standard CR2032 Button Battery

FlexCard mPCIe Connector: 5.1V, 3.3V, 1.8V, VIN, i2c, 2x SPI, 9x GPIO
(Interface details PCB Template available on request)

PHYSICAL SPECIFICATION

Casing Material: Fibre Reinforced ABS

Dimensions: 108.1mm H x 142.6mm W x 230.4mm L

Weight: 376 grams

Mounting Options: 4x 3mm holes

OPERATING ENVIRONMENT

Operating Temperature: -40 °C to 85 °C

Operating Humidity: 10 % to 90 % non-condensing

REGULATORY & TYPE APPROVALS

Regulatory: CE, FCC Part 15 Compliant, CSA (on-request)

FLEXCARD OPTIONS

FLEX-AIO-8-I: 8 Ch Isolated Input/Output Card (0-20mA, 0-12V, Discrete)

FLEX-AI-HS-1.2V: 8 Ch 1.2V Multi function High-Speed Analog Input Card

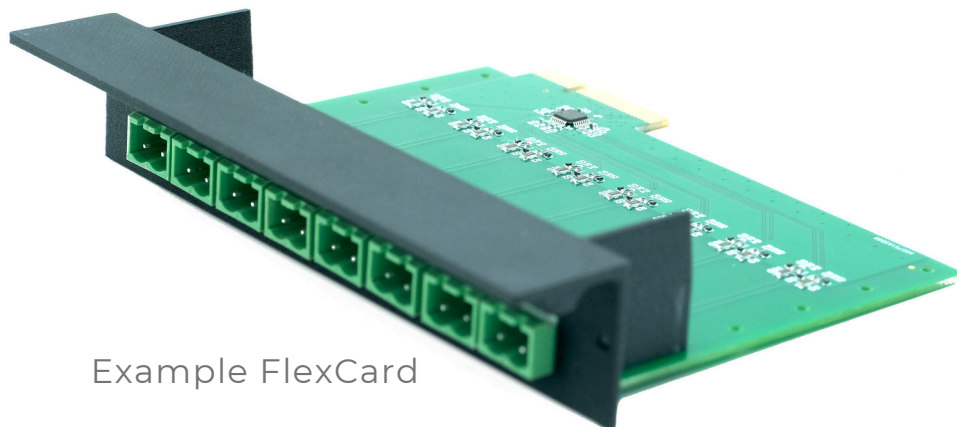
FLEX-AI-HS-60V: 8 Ch 60V Multi function High Speed Analog Input Card

FLEX-AI-HS-300V-I: 8 Ch 300V Iso. Multi func. High Speed Analog Input Card

FLEX-SW-250VAC-5A-RLY: 8 Ch Relay Output Card (250VAC / 5A Relays)

FLEX-SW-30VDC-5A-SS: 8 Ch. Relay Output Card (30VDC / 5A Solid State)

Custom Cards Available on Request



Example FlexCard

