PROMETHEUS ™
SECURITY GROUP GLOBAL

| Solutions		Markets		
COMMAND AND CONTROL C2 - IDS - ACS - Video	ZERO TRUST ARCHITECTURE Cyber Secure from Sensor to C2	DOD	DOE	CRITICAL INFRASTRUCTURE

CONVERGING PHYSICAL SECURITY & ZERO TRUST

UNIVERSAL FIELD PANEL (UFP)

Product Overview - ZTA for Sensor (IDS) and Access Control (ACS) events

The Universal Field Panel (UFP) is a groundbreaking platform built to be the data transmission solution for secure integrated data. The UFP Gateway (UFP-GW) is an open architecture IOT device which provides trustworthy data-gath- ering and control from the edge to the enterprise. The UFP is easily scalable to accommodate dynamic environments with its optional Expansion Modules (EM). This method combines intrusion detection, access control, and industrial data gathering controls into an extremely cost-effective and scalable footprint.
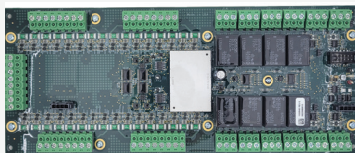
Gateway

- IDS - 16 digital (DESI) inputs
- 64 DESI 128 inputs
- ACS - 4, RS-485 serial ports
- Max 4 DESI per input
- (4) DESI per single channel is typical, (some channels may have more)
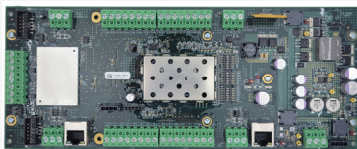
EM-16 Expansion Module

- IDS - 16 digital (DESI) inputs or analog
- 64 DESI or 128 inputs
- ACS - 4, RS-485 serial ports
- Max 4 DESI per input
- (4) DESI per single channel is typical, (some channels may have more)

EM-8 Expansion Module

- IDS - 8 digital (DESI) inputs or analog
- 32 DESI or 64 inputs
- ACS - 2, RS-485 serial ports
- Max 4 DESI per input
- (4) DESI per single channel is typical, (some channels may have more)
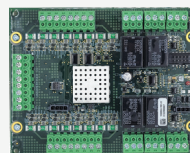
PM4 Power Module

- 4 amp, 1 serial buss for down stream UFP Comm.

Edge to Enterprise Encryption

When combined with the Digital Encrypted Security Interface (DESI) module, the UFP is a revolutionary approach for upgrading any security or control interface's ability to confidently gather authenticated data from the edge.

Scalability

When more device inputs, outputs, and serial points than provided on the UFP are needed, the UFP-EM-8 and UFP-EM-16 expansion modules seamlessly supply additional ports to meet scaling requirements. Each UFP can power up to four amps of expansion modules in sequence. If additional expansion modules are needed, our PM-4 supplementary power supply can be added. A PM-4 can also be used to deploy more expansion modules remotely from the UFP-GW.

Cyber Secure

The UFP is the gateway to the cloud for Zero Trust authenticated and encrypted data. Built from the edge with a cyber security mindset, the UFP ships with a robust set of tools and standards including secure boot, secure key storage, FIPS level cryptography, Trusted Platform Module (TPM) 2.0, and Security Technical Implementation Guide (STIG) compliance.

Open Architecture

The UFP is designed as an open architecture platform capable of hosting Commercial if the shelf (COTS) and Government of the shelf (GOTS) application components. The UFP contains the tools to host database, computing, and container services for COTS and GOTS equipment. With an already secure computing environment, the UFP allows for the modernization of sensing and control applications such as intrusion detection, burglary systems, access control, fire, supervisory control and data acquisition (SCADA), building controls, and more.
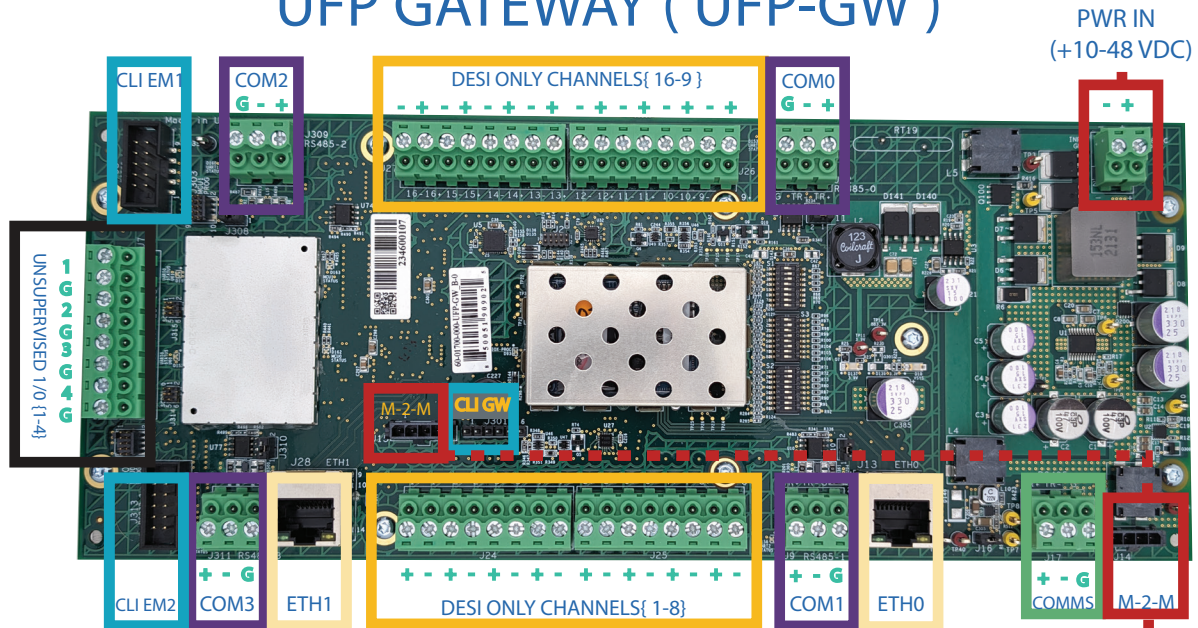
Features	Benefits
Technology Readiness Level (TRL) 7-8	– Mature, tested, field-ready product.
Tools & Standards	– Secure boot/Secure key storage, FIPS level cryptography, trusted Platform Module (TPM) 2.0, robust transient surge protection (UL-2610 & IEC 61000 4:2 to 4:5), security Technical Implementation Guide (STIG)
Modular Open System Approach (MOSA)	– Open Architecture/Non-Proprietary IOT device providing trusted data gathering/control from edge.
Zero Trust Architecture (ZTA)	– Gateway to ZTA (encrypted data to the edge) Executive Order 14028/DOD Zero Trust Strategy Compliant
Docker Containers	– Allows virtual open-source S/W applications supporting IBDSS solutions at the edge. Faster and fewer resources are required.
Expansion Modules	– Provides unparalleled scaling capacity

EM-16 Expansion Module	EM-8 Expansion Module	Gateway	PM-4 Power Module
IDS - 16 inputes (digital or analog)	IDS - 8 inputs (digital or analog)	IDS - 16 digital inputs	4 amp - 1 serial bus for down stream UFP comm.
64 DESI up to 128 inputs	32 DESI up to 64 inputs	64 DESI up to 128 inputs	
ACS - 4 RS-485	ACS - 2 RS-485 serial ports	ACS - 4 RS485 serial ports	

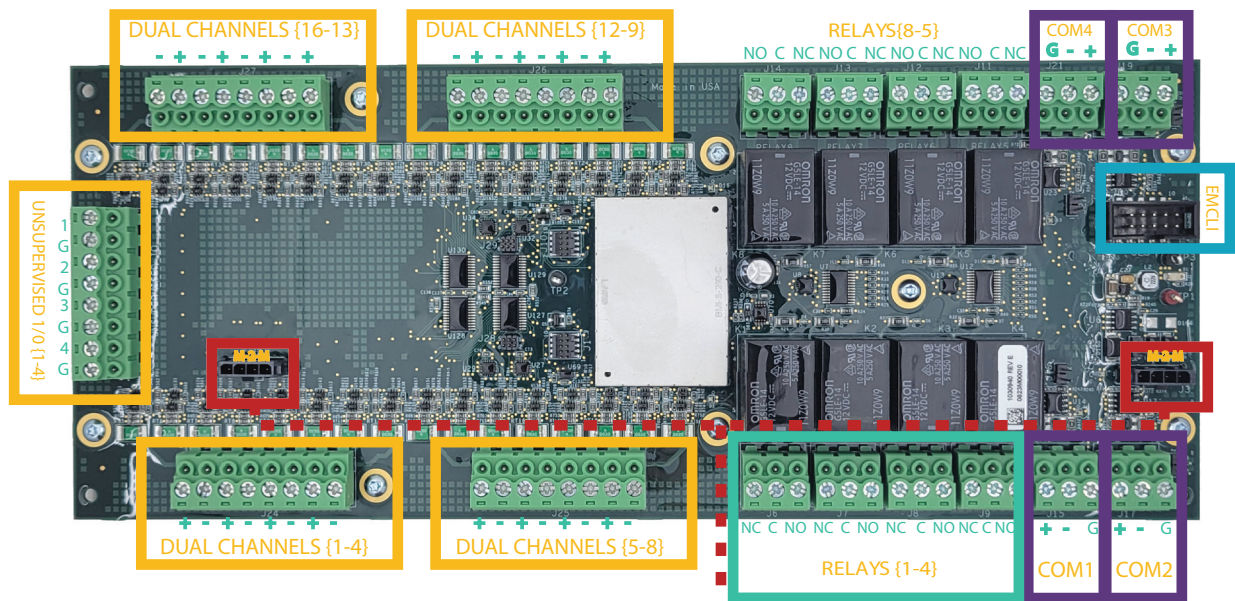| Specification	Description
# of Expansion Modules per GW	Up to 16, any mix 4A power from GW then PM-4 for expansion
# of DESI Channels	EM-8 [8 DESI Channels] supporting [32 DESI] any mix - EM-16 [16 DESI Channels] supporting [64 DESI] any mix
# of DESI Inputs / Outputs	EM-8 [Max 64] sensor inputs or [Max 32] control relays - EM-16 [Max 128] sensor inputs or [Max 64] control relays
# of Field Serial Ports	EM-8 supports 2 / EM-16 supports 4 RS-485 with one port optionally RS-232 - Serial channels are field configurable to support Wiegand
# of Power Relays	EM-8 supports 4 / EM-16 supports 8 SPDT FORM C rated: - [10 A at 120 VAC] / [8 A at 30 VDC] (Resistive) [5 A at 120 VAC] / [4 A at 30 VDC] (Inductive)
# of Supervised Inputs	EM-8 supports 8 legacy inputs (in lieu of DESI per port) - EM-16 supports 16 legacy inputs (in lieu of DESI per port)
Supervision Ranges	Option W [100 ohm to 50k ohm] - Option F *contact factory for OEM custom configurations
# of OSDP Readers	2 per serial port
# of Legacy Wiegand Readers	1 Wiegand reader per serial port
Power Input	[12 VDC nominal] from UFP-GW or via PM-4
Power Consumption	EM-8 [.5A / 6 Watts] / EM-16 [1A / 12 Watts]

UFP GATEWAY (UFP-GW)

PWR IN
(+10-48 VDC)

CLI EM1

COM2
G - +

DESI ONLY CHANNELS{ 16-9 }
- + - + - + - + - + - + - + - +
16 -16+ -15 -15+ -14 -14+ -13 -13+ -12 -12+ -11 -11+ -10 -10+ -9

COM0
G - +

- +

UNSUPERVISED 1/0 {1-4}
1 G 2 G 3 G 4 G

M-2-M   CLI GW

CLI EM2   COM3   ETH1
+ - G

DESI ONLY CHANNELS{ 1-8 }
- + - + - + - + - + - + - + - +

COM1
+ - G

ETH0

COMMS
+ - G

M-2-M

Module to Module Connectors
(12VDC @ 4A + Comms)
Use P/N 367691186

UFP EXPANSION MODULE 1684 (UFP-EM16)

DUAL CHANNELS {16-13}
- + - + - + - +

DUAL CHANNELS {12-9}
- + - + - + - +

RELAYS{8-5}
NO C NC NO C NC NO C NC NO C NC

COM4
G - +

COM3
G - +

EMCLI

UNSUPERVISED 1/0 {1-4}
1 G 2 G 3 G 4 G

M-2-M

DUAL CHANNELS {1-4}
- + - + - + - +

DUAL CHANNELS {5-8}
- + - + - + - +

M-2-M

RELAYS {1-4}
NC C NO NC C NO NC C NO NC C NO

COM1
+ - G

COM2
+ - G

Module to Module Connectors
(12VDC @ 4A + Comms)
Use P/N 367691186

UFP POWER MODULE 4 (UFP-PM4)

PWR IN
(+10-48 VDC)
−+

M-2-M

+- G
COMMS

M-2-M
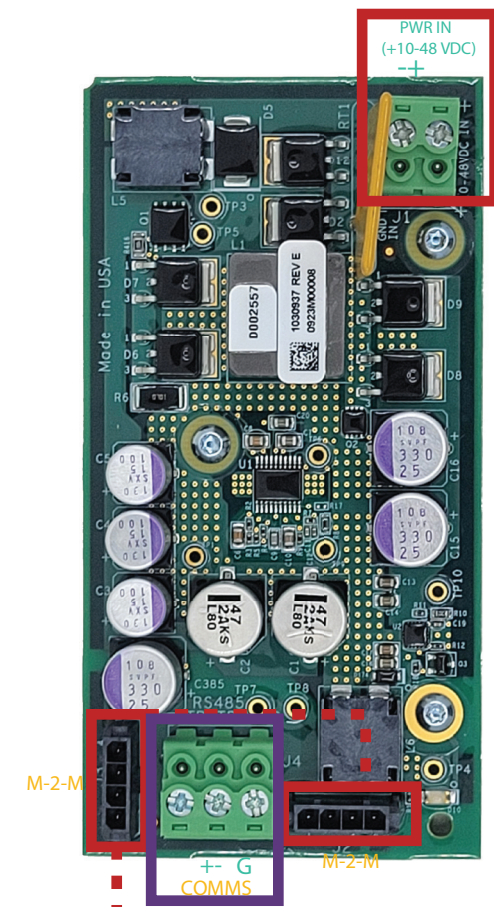
Module to Module Connectors
(12VDC @ 4A + Comms)
Use P/N 367691186

UFP EXPANSION MOUDLE 8 (UFP-EM8)

DUAL CHANNELS
{8-5}
- + - + - + - +

RELAYS
{4-3}
NO C NC NO C NC

COM2
G - +

1 G 2 G 3 G 4 G
UNSUPERVISED I/O
{1-4}

EM CLI

M-2-M

M-2-M

DUAL CHANNELS
{1-4}
- + - + - + - +

RELAYS
{1-2}
NC C NO NC C NO

COM1
+ - G

Module to Module Connectors
(12VDC @ 4A + Comms)
Use P/N 367691186