SmartPower™ Solutions

- Intrinsically Safe design enables routine maintenance in hazardous areas
- Predictable life specified under installed conditions
- Robust design for use in harsh environments
- Low Level alerts for easy maintenance
- Keyed connection for easy and fail-safe replacement

IEC

WirelessHART

New Power Options

Introducing the Blue power module (Model No. A0701PBU), the latest addition to Emerson's SmartPower solutions. This new power module was designed with twice the capacity of the existing Black power module (Model No. 701PBKKF) along with advanced power management technology to optimize performance with the CSI 9420 wireless vibration transmitter. With this new option, the operating life for the CSI 9420 can be extended up to 5 years using a single power module.

Both power modules feature the same output and safety parameters, so in many cases they can be used interchangeably. It is important, however, when implementing the new blue power module in a hazardous area to ensure that it is included as a permissible option on the certification for the transmitter itself.

Due to the larger size of the Blue power module, a new end cap will be required when upgrading an installed device from the Black power module to the Blue power module.

- Hazardous Area Certifications: US/Canada, ATEX and IECEx
- Can be changed in hazardous areas.
- No need to remove the CSI 9420 from plant area to change power module.

Extended life

- Up to 5 year life depending on update rate and environmental conditions

Easy maintenance

- Keyed connections for easy replacement and fail-safe connection

Safe robust design

- Short circuit protection
- No special training required
- Designed for harsh environments

EMERSON
Process Management

Specifications

Humidity limits
0-100% relative humidity

Temperature limits

Operating limit	Storage limit
–40 to 185 °F –40 to 85 °C	–40 to 185 °F –40 to 85 °C

Rated voltage
7.2V

Weight
14.3 oz. (405 g)

Enclosure
Polybutylene terephthalate (PBT)

Battery chemistry
Lithium-Thionyl chloride

Electromagnetic compatibility (EMC)
Meets all relevant requirements of EN 61326-1: 2006: EN 61326-2-3; 2006.

Vibration effect
No effect when tested per the requirements of IEC60770-1: High Vibration Level – field or pipeline (10-60 Hz 0.21 mm displacement peak amplitude / 60-2000 Hz 3g)

Power Module Life Estimation

Up to 5 year life depending on update rate and environmental conditions[1]. Default acquisition rates are:

Data Type	Collection Rate
HART variables	60 minutes
Energy bands	8 hours
Thumbnail spectra	24 hours
Waveform	1 month or on-alert
Additional data	On-demand

[1]Part of a well-formed network. Limited to 2-3 Network descendants. 70ºF ambient temperature and with current versions of the CSI 9420 and AMS Machinery Manager Software. Operation at extreme temperatures or with older versions may significantly lower achievable operating life.

Product Approvals

European Directive Information
The most recent version of the EC Declaration of Conformity can be found at www.emerson.com.

Ordinary Location Certification
The transmitter has been examined and tested to determine that the design meets the basic electrical, mechanical, and fire protection requirements.

Hazardous Location Certification

US/Canada Certificate 70051230
Marking: Ex ia IIC T4 Ga, Cl I, Div 1, Gr A-D
Ta = -55ºC to +85ºC

Europe Certificate Sira 15ATEX2332X
Marking: II 1G, Ex ia IIC T4 Ga
Ta = -55°C to +85°C

International Certificate IECEx CSA 15.0045X
Marking: Ex ia IIC T4 Ga
Ta = -55°C to +85°C

Refer to installation drawing D25686 and entity parameters:

Uo/Voc = 7.8V Io/Isc = 2.16A Po = 0.83W
Co/Ca = 3.0µF Lo/La = 9.4µH

Compatibility
While specifically designed for use with the CSI 9420, the Model A0701PBU blue power module may in certain circumstances also be compatible with other Emerson wireless transmitters. It has been certified intrinsically safe as indicated above; however, always refer to the individual certification requirements for each product to determine whether it is suitable for installation and in which environments.

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