

dametric 

IEN-DM1 IEN-DM2

GMS Industrial EtherNet/IP Module



1 General

The IEN-DM1/IEN-DM2 are communication modules for data interchange between the EtherNet/IP and a CAN-bus. IEN-DM1 are used together with refiners equipped with TDC or AGS sensors. IEN-DM2 are used for LC or board type refiners. They have the same specifications but are preloaded with different software

2 Document revision

2019-09-16/BL First release.

2019-11-20/BL Added IEN-DM2.

3 Article number

<i>Unit</i>	<i>SKC</i>	<i>Valmet</i>
IEN-DM1	SKC9952326	VAL0426984
IEN-DM2	SKC	VAL0430914

4 Technical Specification

Size	120 * 75 * 27 mm
Power supply	24VDC, +/- 10%
Power consumption	150 mA typ.
Temperature range	-25 till 55 °C
Data area	In 512 byte Out 512 byte
Enclosure	IP20
CAN standard	2.0B
CAN data rate	250 kbit/s
Ethernet data rate	10/100 Mbit/s

5 Software

The unit contains dedicated software to control the data interchange between the IEN unit and the used GMS system from Dametric.

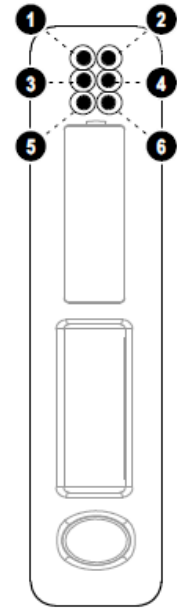
<i>Module</i>	<i>Version</i>	<i>GMS-system</i>	<i>Refiner</i>
IEN-DM1	R102-V1A02	GMS-V1A01	RGP-268
IEN-DM1	R102-V1A02	GMS-V2A01	RGP-CD82
IEN-DM2	R101-V1X01	GMS-V1X01	RGP-262

The software generates CAN-messages to the GMS units control the information to dedicated addresses for the EtherNet/IP. A separate document specifies the data and addresses.

6 Status leds

The 6 status led indicates the status of the communication.

Led	Color	Status
1 Module status	Off	No power
	Green	Controlled by a scanner in Run state
	Flashing green	Not configured or scanner in Idle state
	Flashing red	Minor fault, recoverable
	Red	Major fault, unrecoverable
	Flashing green/red	Self test in progress
2 Network status-	Off	No power or no IP address
	Green	On-line, one or more connections established (CIP Class 1 or 3)
	Flashing green	On-line, no connection established
	Flashing red	One or more connections timed out (CIP class 1 or 3)
	Red	Duplicate IP address, fatal error
	Flashing green/red	Self test in progress
3/4 Link/ Activity	Off	No link sensed on port 1/2
	Flashing green	Activity, receiving/transmitting Ethernet packets at 100 Mbit/s
	Flashing yellow	Activity, receiving/transmitting Ethernet packets at 10 Mbit/s
5 CAN- Subnet status	Off	Power off/no CAN communication
	Green	Running with no transaction error/timeout
	Flashing green	Not all transactions have been executed at least once since startup and no transaction error/timeout has occurred
	Flashing red	Transaction error/timeout or subnetwork stopped
	Red	Fatal error
6 Device status	Off	Power off
	Alternating red/green	Invalid or missing configuration
	Green	Operation mode Run
	Flashing green	Operation mode Idle
	Red	Fatal error

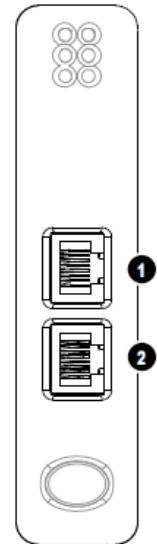
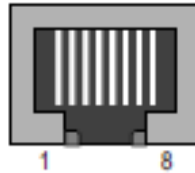


7 Connectors

7.1 EtherNet/IP

8-pole RJ-45 connector for the EtherNet/IP ports 1 and 2.

Pin	Description
1	TD+
2	TD-
3	RD+
4,5,6,7	Connect to ground
6	RD-
Cover	Cable shield



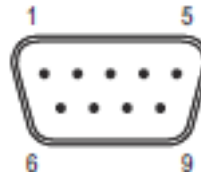
7.2 USB

This connector is only used during program load/update.

7.3 CAN

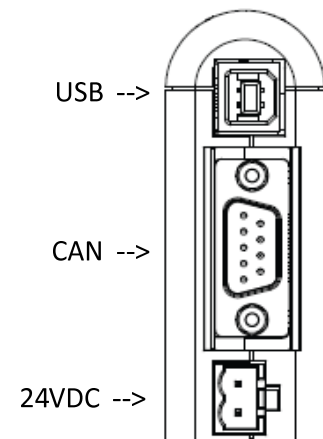
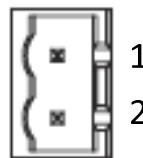
9-pole D-sub connector with screw plinths

Pin	Description
2	CANL
5	Housing (do not connect)
7	CANH
1,4,8,9	Not used
3,6	CAN GND (do not connect)



7.4 Power supply

Pin	Description
1	+24VDC
2	GND



8 Contact

Development, production and service:

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