

# IOM3.4

Input/output module

**Data sheet**



Improve  
Tomorrow



**1. Multi-line 300**  
1.1 About the hardware modules.....3

**2. Technical specifications**  
2.1 Input/output module IOM3.4.....4

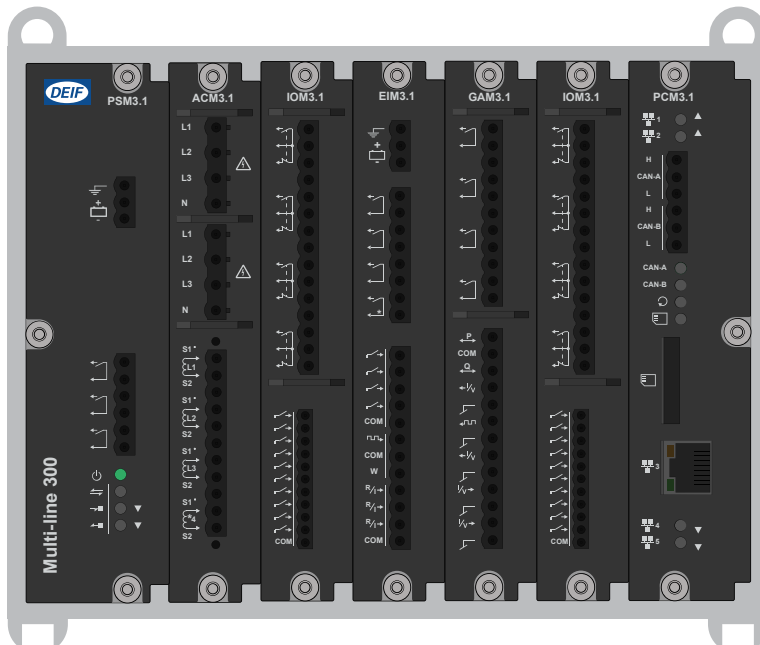
**3. Legal information**  
3.1 Disclaimer and copyright.....6

# 1. Multi-line 300

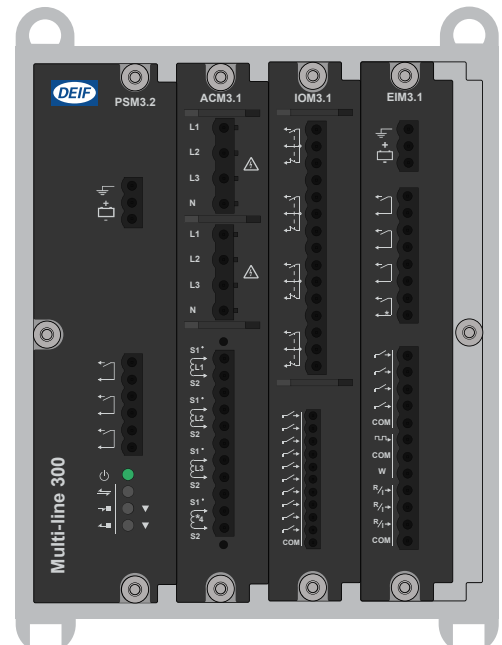
## 1.1 About the hardware modules

The Multi-line 300 (ML 300) hardware modules are printed circuit boards that slot in to either a rack R7.1 or rack R4.1. Depending on the type of module, they can provide measurement connections, inputs, and outputs.

Example rack R7.1



Example rack R4.1



The hardware modules feature:

- Placement flexibility in the rack.
- Remove, replace, or add on-site.
- Automatically recognised.
- Configurable input and output functions (digital and analogue):
  - Digital input functions: Commands from operators or 3rd party equipment, changing configuration, operating information.
  - Digital output functions: Alarm status, commands to 3rd party equipment, operating information.
  - Analogue input functions: External set points, operating information, supervised binary inputs.
  - Analogue output functions: Regulation \*, operating information.

**NOTE** \* Only available on certain types of controller.

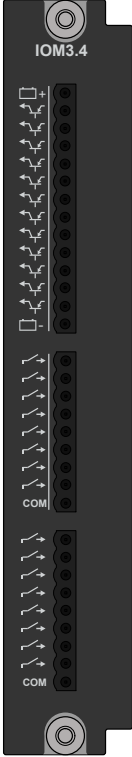


All slots must be covered during operation and blind modules can be used to cover unused slots.

## 2. Technical specifications



### 2.1 Input/output module IOM3.4

The input output module has 12 digital outputs, and 16 digital inputs. These I/Os are all configurable.

#### IOM3.4 terminals

Module	Count	Symbol	Type	Name
	12		Digital output	Configurable
	16		Digital input	Configurable

#### IOM3.4 technical specifications

Category	Specification
<b>Digital outputs</b> 	Transistor type: PNP Supply voltage: 12 or 24 V DC nominal, maximum 36 V DC (relative to common) Maximum current (per output): < 55 °C: 250 mA; > 55 °C: 200 mA Leak current: Typical 1 µA, maximum 100 µA (temperature-dependent) Saturation voltage: Maximum 0.5 V Non-replaceable 4 A fuse Voltage withstand: ±36 V DC Load dump protected by TVS diodes Short circuit protection Reverse polarity protection Internal freewheeling diode
<b>Digital inputs</b> 	Bipolar inputs <ul style="list-style-type: none"><li>ON: -36 to -8 V DC, and 8 to 36 V DC</li><li>OFF: -2 to 2 V DC</li></ul> Minimum pulse length: 50 ms Impedance: 4.7 kΩ Voltage withstand: ±36 V DC
<b>Terminal connections</b>	Terminals: Standard 45° plug, 1.5 mm <sup>2</sup> Wiring: 0.1 to 1.5 mm <sup>2</sup> (28 to 16 AWG), multi-stranded

Category	Specification
<b>Torques and terminals</b>	Module faceplate screws: 0.5 N·m (4.4 lb-in) Connection of wiring to terminals: 0.25 N·m (2.2 lb-in) UL/cUL Listed: Wiring must be minimum 90 °C (194 °F) copper conductors only
<b>Galvanic isolation</b>	Between groups: 600 V, 50 Hz for 60 s
<b>Ingress protection</b>	Unmounted: No protection rating Mounted in rack: IP20 according to IEC/EN 60529
<b>Dimensions</b>	L×H×D: 28 × 162 × 150 mm (1.1 × 6.4 × 5.9 in)
<b>Weight</b>	175 g (0.4 lb)

## 3. Legal information

### 3.1 Disclaimer and copyright

#### Open source software

This product contains open source software licensed under, for example, the GNU General Public License (GNU GPL) and GNU Lesser General Public License (GNU LGPL). The source code for this software can be obtained by contacting DEIF at [support@deif.com](mailto:support@deif.com). DEIF reserves the right to charge for the cost of the service.

#### Trademarks

*DEIF*, *power in control* and the DEIF logo are trademarks of DEIF A/S.

*Adobe*®, *Acrobat*®, and *Reader*® are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

*CANopen*® is a registered community trademark of CAN in Automation e.V. (CiA).

*SAE J1939*® is a registered trademark of SAE International®.

*EtherCAT*®, *EtherCAT P*®, *Safety over EtherCAT*®, are trademarks or registered trademarks, licensed by Beckhoff Automation GmbH, Germany.

*Modbus*® is a registered trademark of Schneider Automation Inc.

*Windows*® is a registered trademark of Microsoft Corporation in the United States and other countries.

All trademarks are the properties of their respective owners.

#### Copyright

© Copyright DEIF A/S. All rights reserved.

#### Disclaimer

DEIF A/S reserves the right to change any of the contents of this document without prior notice.

The English version of this document always contains the most recent and up-to-date information about the product. DEIF does not take responsibility for the accuracy of translations, and translations might not be updated at the same time as the English document. If there is a discrepancy, the English version prevails.