

Technical Information Manual

Revision n. 1

28 January 2008

Mod. A941MEI

*IP65 UHF stand alone reader
(ETSI EN 302 208)*

NPO:

00107/05:941M2.MUT_x/01

<u>Manufacturer:</u>	CAEN RFID Srl Via Vetraia, 11 55049 Viareggio (LU) Italy
<u>Product Model Code.:</u>	WA941MEIXAAA
<u>Product Model Description:</u>	IP65 UHF stand alone reader (ETSI EN 302 208)
<u>Standards to which conformity is declared</u>	ETSI EN 301 489-3 V1.4.1 (2002/08) ETSI EN 302 208-2 V1.1.1 (2004/09) CEI EN 60950-1 (2004/05) CEI EN 50364 (2002/10)

The present document declares that the specified product complies with the reported standards and satisfies the essential requirements of the European regulations: 73/23/CEE (EMC), 89/336/CEE (LV) and of the following modifications, 92/31/CEE and 93/68/CEE.



Viareggio, 19/09/2007

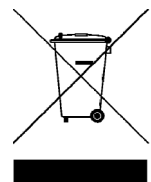
Chief Executive Officer
Adriano Bigongiari

On the basis of this declaration, this product will bear the following mark:



Disposal of the Product

The product must never be dumped in the Municipal Waste. Please check your local regulations for disposal of electronics products.



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INDEX

1. INTRODUCTION	4
2. TECHNICAL SPECIFICATIONS.....	5
2.1. MOD. A941MEI TECHNICAL SPECIFICATIONS TABLE.....	5
2.2. EXTERNAL CONNECTIONS.....	6
2.2.1. Power connector.....	6
2.2.2. GPIO Connector.....	7
2.2.3. RS-232 Connector	7
2.2.4. Antenna connector.....	7
2.3. MOD. A941MEI DIMENSION AND MECHANICAL DRAWING.....	8

LIST OF FIGURES

FIG. 1.1: MOD. A941MEI IP65 UHF STAND ALONE READER (ETSI EN 302 208).....	4
FIG. 2.1: MOD. A941MEI BACK PANEL	6
FIG. 2.2: MOD. A941MEI FRONT PANEL	6
FIG. 2.3: POWER CONNECTOR PIN ASSIGNMENT.....	6
FIG. 2.4: GPIO CONNECTOR PIN ASSIGNMENT.....	7
FIG. 2.5: RS232 CONNECTOR PIN ASSIGNMENT	7
FIG. 2.6: A941MEI BOX TOP VIEW.....	8
FIG. 2.7: A941MEI BOX END VIEW	8
FIG. 2.8: A941MEI BOX SIDE VIEW.....	8
FIG. 2.9: A941MEI INSIDE BOX AND CONNECTOR LOCATION	9

LIST OF TABLES

TABLE 2.1: MOD. A941MEI TECHNICAL SPECIFICATIONS.....	5
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1. Introduction

The A941MEI IP65 UHF stand alone reader (ETSI EN 302 208) is a multi protocol long range reader module in an IP65 enclosure, designed to be integrated into a user's infrastructure requiring UHF tag programming and reading.

It is fully compliant to European regulations ETSI EN 302 208 (865.6 - 867.6MHz) and ETSI EN 300 220 (869.525 MHz).

The A941MEI supports ISO 18000-6B, Philips UCODE EPC 1.19, and EPC Class1 Gen2. Other UHF protocols may be available by firmware upgrade.

Rugged IP65 housing meets the demands of rough industrial environment, including warehouse and vehicle mount applications



Fig. 1.1: Mod. A941MEI IP65 UHF stand alone reader (ETSI EN 302 208)

2. Technical Specifications

2.1. Mod. A941MEI Technical Specifications Table

Table 2.1: Mod. A941MEI Technical Specifications

Frequency	865.6 – 867.6 MHz (ETSI EN 302 208) 869.525 MHz (ETSI EN 300 220)
Output Power	SW programmable Max.: 1.5 W (32 dBm) ⁽¹⁾
Antenna Connector	Nr. 4 TNC type female
Frequency Tolerance	±10 ppm over the entire temperature range
Number of Channels	Single ch.: compliant to ETSI EN 300 220; 10 ch.: compliant to ETSI EN 302 208
Channel Occupancy	In accordance with ETSI EN 300 220 and 302 208 regulation
Digital I/O	Five I/O lines 3.3 V out, 5 V tolerant
Standard Compliance	ISO 18000-6B Philips UCODE EPC 1.19 EPC C1G2
Ports	RS232; 9.6÷115 kbit/s data rate (settable)
Receiving Capability	Data rate 40/40 Kbits/s
Dimensions	217 x 119 x 39 mm ³ (8.5 x 4.7 x 1.5 inches ³)
Electrical Power	Voltage range: 15± 5% Vdc Power: 1 A @ 15 V (TX/RX mode); 260 mA @ 15 V (idle mode)
Operating Temperature	-20 °C to 70°C
Environmental rating	IP65
Weight	925 g (2.0 lbs)

⁽¹⁾ RF Power up to 2 W ERP @ 3.5 dBi antenna

2.2. External connections

The location of the connector is shown in Fig. 2.1 e Fig. 2.2.

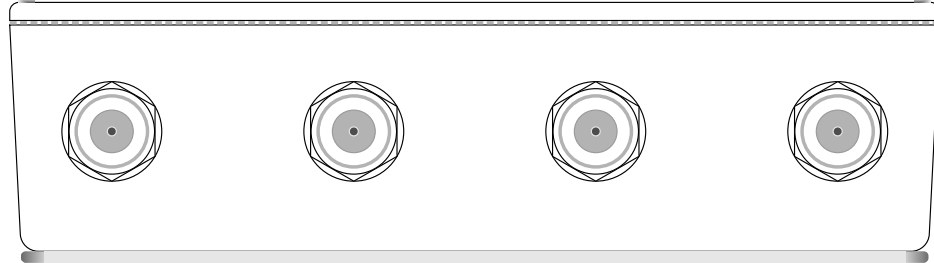


Fig. 2.1: Mod. A941MEI Back Panel

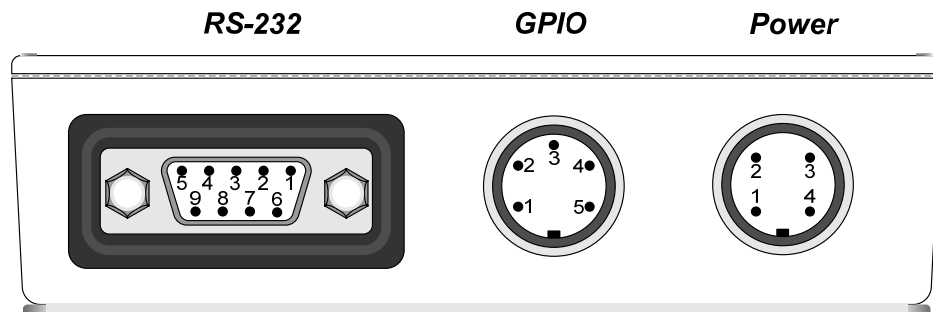


Fig. 2.2: Mod. A941MEI Front Panel

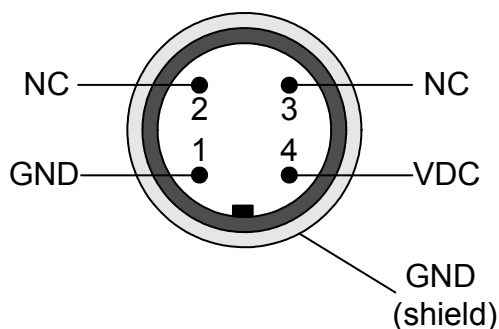
The mechanical specifications of the connectors are listed below:

2.2.1. Power connector

Type: Amphenol C09131N0041002

Location: Front Panel

See figure for pin assignment



Pin#	Description
1	GND
2	Do not connect
3	Do not connect
4	VDC Supply voltage 15± 5%

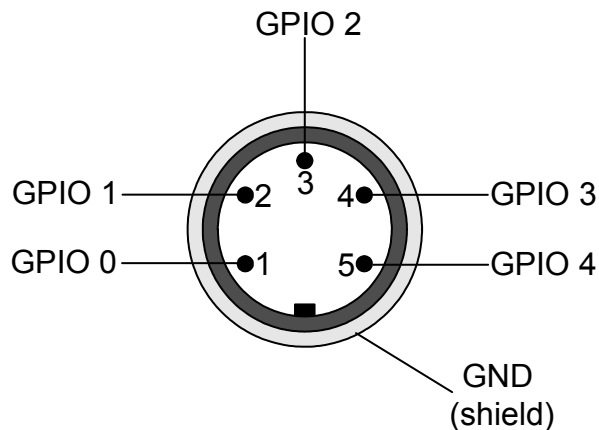
Fig. 2.3: Power connector pin assignment

2.2.2. GPIO Connector

Type: Amphenol C09131N0051002

Location: Front Panel

See figure for pin assignment



Pin#	Description
1	GPIO 0
2	GPIO 1
3	GPIO 2
4	GPIO 3
5	GPIO 4

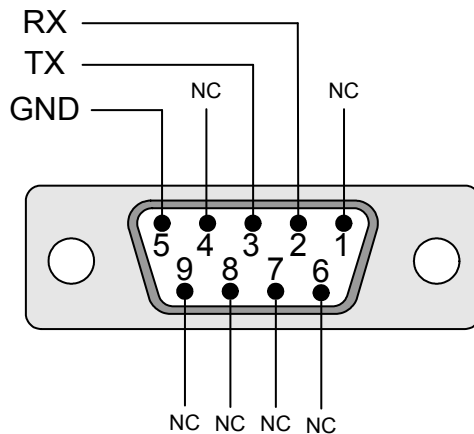
Fig. 2.4: GPIO Connector pin assignment

2.2.3. RS-232 Connector

Type: FCT FWD F 09 S (9 pin D female) connector

Location: Front Panel

See figure for pin assignment



Pin#	Description
1	Do not connect
2	RX
3	TX
4	Do not connect
5	GND
6	Do not connect
7	Do not connect
8	Do not connect
9	Do not connect

Fig. 2.5: RS232 Connector pin assignment

2.2.4. Antenna connector

Type: TNC RADIALL 296 311 653 connector

Location: Back Panel

2.3. Mod. A941MEI dimension and mechanical drawing

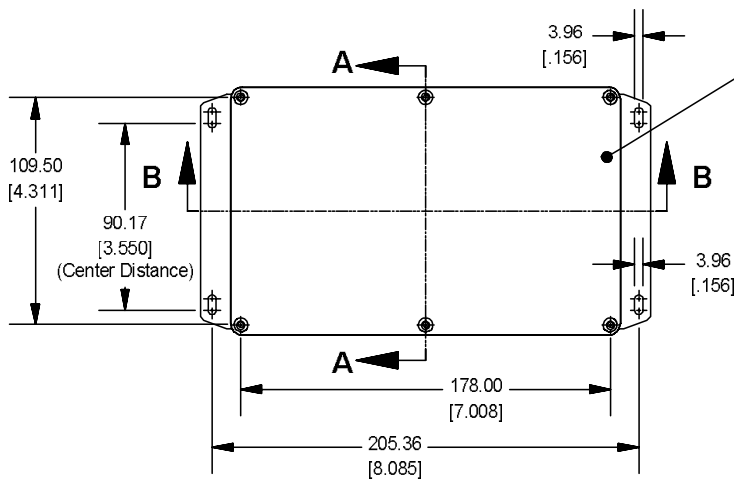


Fig. 2.6: A941MEI Box top view

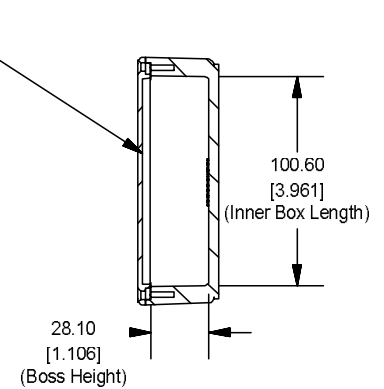


Fig. 2.7: A941MEI Box end view

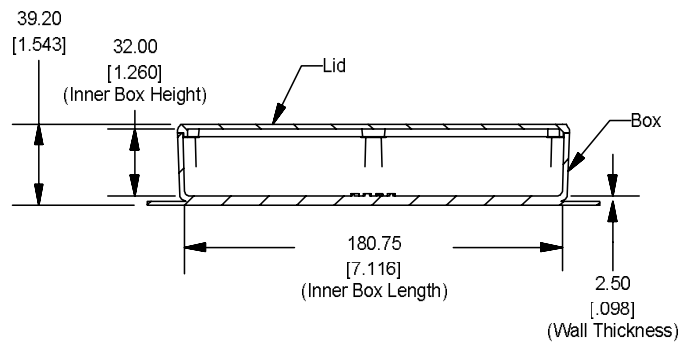


Fig. 2.8: A941MEI Box side view

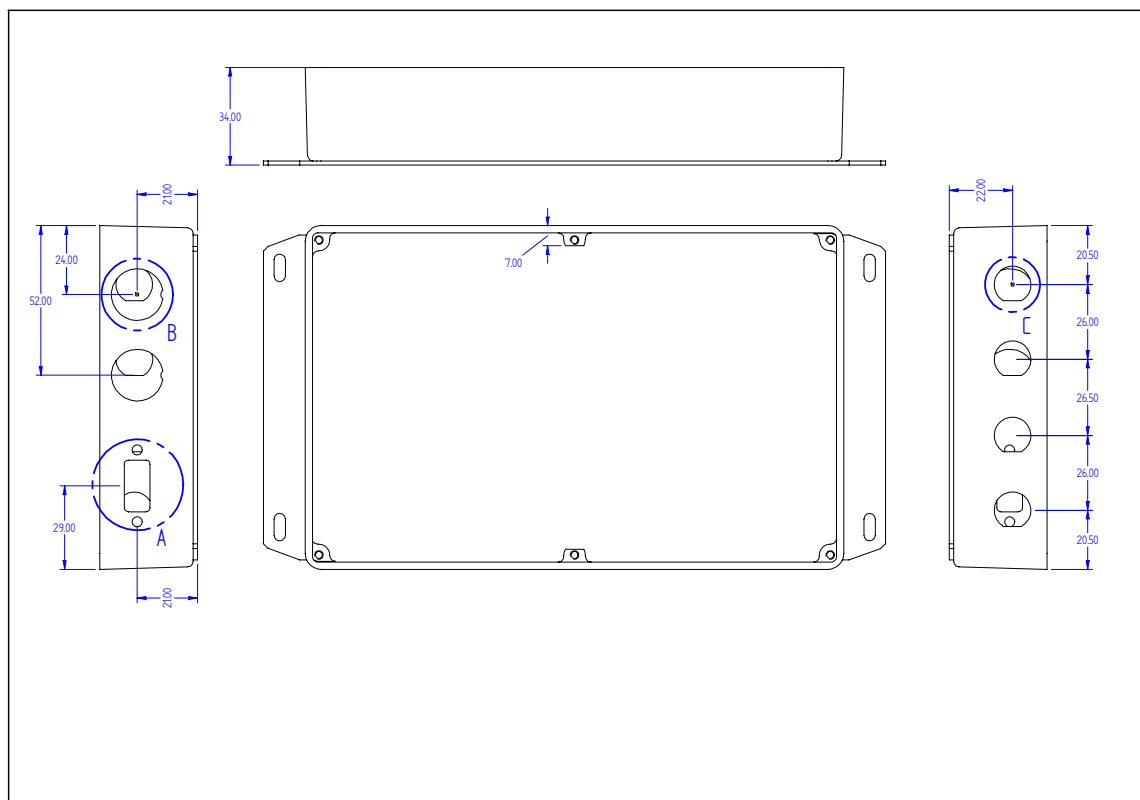


Fig. 2.9: A941MEI inside Box and connector location