NUVO ENERGY AFRICA

GENERATOR INTEGRATION KIT-XXX

CERTIFICATE PACK Rev 1.0

1 Table of Contents

1 Introduction

The NE-GIK-XXX range of kits is an electrical assembly of components sourced and tested by Nuvo Energy. The pre-assembly, testing and software setup that Nuvo Energy have created ensures an easy to install industry standard kit.

The kit is dependent on the manufacturer certification of all parts used in the kit. This document serves as a reference of the certification documents of all relevant parts used in NE-GIK-XXX range of kits.

2 Warranty

Please refer to the relevant NE-GIK-XXX Warranty document for all warranty information.

3 Manufacturers

3.1 Cynergy – Wattmon

Cynergy, Maitreye, Auroville – 605 101, Tamil Nadu, India
A unit of ADPS Trust, Auroville Foundation
Tel: +91 413 262 2059
Email: info@wattmon.com
Web: www.wattmon.com

EC Declaration of Conformity

In accordance with EN ISO 17050-1:2004

We Cynergy (A Unit of ADPS Trust – Under the Auroville Foundation)

of Maitreye, Auroville, Tamil Nadu, India. 605101.

in accordance with the following Directive(s):

2004/108/EEC The Electromagnetic Compatibility Directive

hereby declare that:

Equipment WattmonMEGA IoT Data Logger

Model number WMMEGA

International Article Number (EAN) 0640350189064

is in conformity with the applicable requirements of the following documents

Ref. No.	Title	Edition/date
CISPR-22, Class A	Information Technology Equipment. Radio Disturbance Characteristics. Limits and Methods of Measurement.	2010
CISPR-32. Class A	Industrial, Scientific and Medical Equipment. Radio Disturbance Characteristics. Limits and Methods of Measurement.	2012
IEC EN 61000-4-2	Electomagnetic Compatibility (EMC). Testing and Measurement Techniques- Electostatic Discharge Immunity Test.	2008
IEC EN 61000-4-4	Electomagnetic Compatibility (EMC). Testing and Measurement Techniques- Electrical Fast Transient/Burst Immunity Test.	2011
IEC EN 61000-4-5	Electomagnetic Compatibility (EMC). Testing and Measurement Techniques- Surge Immunity Test.	2005

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications. The unit complies with all applicable Essential Requirements of the Directives.

Signed :

Name : Akash Heimlich

Position : Executive

Location : Auroville

On : 22 August 2017

CE17

3.2 Meanwell

MEAN WELL

CE

Declaration of Conformity

For the following equipment：

Product Name: Din Rail Switching Power Supply

Model Designation: HDR-30-x (x=5,12,15,24,48)

is herewith confirmed to comply with the requirements set out in the Council Directive, the following standards were applied：

RoHS Directive (2011/65/EU)、(EU)2015/863

Low Voltage Directive (2014/35/EU)：

EN62368-1:2014+A11:2017
EN61558-1:2005+A1/EN61558-2-16:2009+A1

CB certificate No：DK-87473-UL
TUV certificate No：R50360934

Electromagnetic Compatibility Directive (2014/30/EU)：

EMI (Electro-Magnetic Interference)

Conducted emission / Radiated emission

	EN55032:2015	Class B
Harmonic current	EN61000-3-2:2014	
Voltage flicker	EN61000-3-3:2013	

EMS (Electro-Magnetic Susceptibility)

EN55024:2010+A1:2015 EN61000-6-2:2005

ESD air	EN61000-4-2:2009	Level 3	8KV
ESD contact	EN61000-4-2:2009	Level 2	4KV
RF field susceptibility	EN61000-4-3:2006+A1:2008+A2:2010	Level 3	10V/m
EFT bursts	EN61000-4-4:2012	Level 3	2KV/5KHz
Surge susceptibility	EN61000-4-5:2014	Level 4	2KV/Line-Line
Conducted susceptibility	EN61000-4-6:2014	Level 3	10V
Magnetic field immunity	EN61000-4-8:2010	Level 4	30A/m
Voltage dip, interruption	EN61000-4-11:2004	>95% dip 0.5 periods	30% dip 25 periods >95% interruptions 250 periods

Note:

A component power supply with load will be installed into final equipment which consists of an electronically shielded metal enclosure. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.

The EMC tests mentioned above are performed using a well defined metal plate to simulate said metal enclosure.

For guidance on how to perform these EMC tests, please refer to “EMI testing of component power supplies”.(as available on http://www.meanwell.com)” and TDF (Technical Documentation File).

This Declaration is effective from serial number EB9xxxxxxx

Person responsible for marking this declaration：

MEAN WELL Enterprises Co., Ltd.
(Manufacturer Name)

No.28, Wuquan 3rd Rd., Wugu Dist., New Taipei City 24891, Taiwan
(Manufacturer Address)

Johnny Huang/Manager, Certification Center：
(Name / Position)

(Signature)

Alex Tsai/Director, Marketing Department：
(Name / Position)

(Signature)

Taiwan
(Place)

Sep. 5th, 2019
(Date)

Version：3

CE

VERIFICATION OF COMPLIANCE

This Verification of Compliance is hereby issued to the below named company. The test results of the report number: C160921E04-ET relate only to the tested sample identified in the report number: C160921E04-ET.

EMC DIRECTIVE 2014/30/EU

General Information

Applicant: N/A

Product Description

EUT Description: Switching Power Supply
Brand Name: MEANWELL
Model Number: HDR-30-x (x= 5, 12, 15, 24 or 48)

Measurement Standard

EN 55032: 2012/AC:2013
EN 55022: 2011
EN 61000-3-2:2014
EN 61000-3-3:2013
EN 55024 :2010
EN 61000-6-2:2005
EN 61000-4-2:2009; EN61000-4-3:2010 ; EN 61000-4-4:2012; EN 61000-4-5:2014; EN 61000-4-6:2014;EN 61000-4-8:2010; EN 61000-4-11:2004

Measurement Facilities

Kunshan BU. Name: ***Compliance Certification Services Inc. Kunshan Laboratory***
No.10 Weiye Rd., Innovation park, Eco&Tec,
Development Zone, Kunshan City, Jiangsu, China
Tel: + 86-512-57355888/ FAX: +86-512-57370818

This device has been shown to be in compliance with and was tested in accordance with the measurement procedures specified in the Standards & Specifications listed above and as indicated in the measurement report number: C160921E04-ET

Jeff fang

Jeff.Fang /EMC Manager
Date: November 08, 2016

CCSRF 程智电子科技（昆山）有限公司
Compliance Certification Services Inc. Kunshan Laboratory

3.3 Schneider

DocuSign Envelope ID: 90D026DE-4CA0-4311-8CE0-A3A17C5530C7

Schneider Electric

Déclaration UE de Conformité
EU Declaration of Conformity
EU-Konformitätserklärung

N°/Nr
ECDIEM3000-MID-V8A

Identification Produits / Products identification/ Produkt Identifikation:

Objet de la déclaration:
Object of the declaration:
Gegenstand der Erklärung

iEM3000 range (MID versions)
See models in annex

La présente déclaration de conformité est établie sous la seule responsabilité du fabricant.
Nous, soussignés SCHNEIDER ELECTRIC INDUSTRIES SAS, déclarons par la présente que nos produits catalogués sous marque Schneider Electric, et sous réserve d'installation, d'entretien et d'utilisation conformes à leur destination, à la réglementation, aux normes en vigueur au sein du pays d'installation, aux instructions du constructeur et aux règles de l'art, sont conformes aux exigences essentielles des Directives Européennes suivantes :

- **Directive Basse Tension** : 2014/35/UE
- **Directive CEM** : 2014/30/UE
- **MID** (2014/32/UE)
- **Directive ROHS** : 2015/863/UE

Cette déclaration UE de conformité atteste que le respect des exigences essentielles énoncées à l'annexe I et à l'annexe MI-003 a été démontré. Voir les certificats de type N° 0120/SGS0098 & 0120/SGS0099.

Le marquage CE sur le(les) produits et/ou son(leur) emballage signifie que Schneider Electric tient à la disposition des autorités de l'Union Européenne le(s) dossier(s) technique(s) de référence.

This declaration of conformity is issued under the sole responsibility of the manufacturer.
We undersigned SCHNEIDER-ELECTRIC INDUSTRIE SAS declare that Schneider Electric branded products, when subject to correct installation, maintenance and use conforming to their intended purpose, according to applicable regulations and standards in the country where they are installed, to the supplier's instructions and to accepted rules of the art comply with Essential Requirements of following European Directives:

- **Low Voltage Directive :** 2014/35/EU
- **EMC Directive :** 2014/30/EU
- **MID** (2014/32/EU)
- **ROHS Directive**: 2015/863/EU

The fulfillment of essential requirements set out in Annex I and annex MI-003 has been demonstrated, see EC-type examination certificates no 0120/SGS0098 & 0120/SGS0099.

The CE marking on the product(s) and/or its(their) packaging signifies that Schneider Electric holds the reference technical file(s) available to the European authorities.

Die alleinige Verantwortung für die Ausstellung dieser Konformitätserklärung trägt der Hersteller.
Im Namen von SCHNEIDER-ELECTRIC INDUSTRIE SAS bestätigen wir, dass die unter der Marke Schneider Electric verkauften Produkte den wesentlichen Anforderungen der folgenden Europäischen Richtlinien entsprechen, insofern sie entsprechend den geltenden Vorschriften und Normen des Landes und den anerkannten Regeln der Technik installiert und gewartet werden, sowie gemäß dem in der Herstellerbedienungsanleitung vorgesehenen Zweck verwendet werden:

- **Niederspannungsrichtlinie** (2014/35/EU)
- **EMV richtlinie** (2014/30/EU)
- **MID** (2014/32/EU)
- **ROHS Richtlinie**: 2015/863/EU

Die Erfüllung der grundlegenden Anforderungen, die in Anhang I und Anhang MI-003 nachgewiesen wurde, siehe EG-Baumusterbescheinigungen keine 0120 / SGS0098 & 0120 / SGS0099.

Die CE-Kennzeichnung auf dem Produkt (e) und / oder dessen (deren) Verpackung bedeutet, dass Schneider Electric mit dem Aktenzeichen technische hält (n) bei den europäischen Behörden.

DocuSigned by:
1D0846CDA14244D...

Nom, Fonction/Name, title : **Antoine DESTRIBATS** - Vice President, Customer Satisfaction and Quality

Date et lieu d'établissement/ Place and date : 21-juil.-2020

Schneider Electric Industries SAS
Postal address / Adresse postale/ Postadresse :
35 rue Joseph Monier
F – 92500 Rueil-Malmaison
http://www.schneider-electric.com

Legal information / Mentions légales
Société par actions simplifiée au capital de 896 313 776 euros
954 503 439 rcs Nanterre – code APE : 2712Z
Siret : 954 503 439 01719
n° ident. TVA : FR 04 954 503 439
Siège social : 35 rue Joseph Monier
F – 92500 Rueil-Malmaison

DocuSign Envelope ID: 90D026DE-4CA0-4311-8CE0-A3A17C5530C7

Signature/Signature :

ANNEX

Commercial name(s)	Commercial reference(s)	CE marking application date	Applicable standards
iEM3110 iEM3115 iEM3210 iEM3215	A9MEM3110 A9MEM3115 A9MEM3210 A9MEM3215	2012(updated)	***As Power Meter / Power Monitor:*** ■ EN 61557-12:2008 ■ EN 61326-1:2013 ■ EN 61010-1:2010 ■ EN 61010-2-030:2010 ***As Sub-Meter*** ■ EN 62052-11:2003 ■ EN 62053-21:2003/ EN 62053-22:2003 ■ EN62053-23:2003 ***As MID Sub-Meter:*** ■ EN 50470-1:2006 ■ EN 50470-3:2006
iEM3310	A9MEM3310	2014	
iEM3135 iEM3155 iEM3165 iEM3175 iEM3235 iEM3255 iEM3265 iEM3275	A9MEM3135 A9MEM3155 A9MEM3165 A9MEM3175 A9MEM3235 A9MEM3255 A9MEM3265 A9MEM3275	2012(updated)	
iEM3335 iEM3355 iEM3365 iEM3375	A9MEM3335 A9MEM3355 A9MEM3365 A9MEM3375	2014	

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n° ident. TVA : FR 04 954 503 439
Siège social : 35 rue Joseph Monier
F – 92500 Rueil-Malmaison

CERTIFICATE OF COMPLIANCE

Certificate Number	20131202-E360954
Report Reference	E360954-A1-UL
Issue Date	2013-DECEMBER-02
Issued to:	SCHNEIDER ELECTRIC (CHINA) CO LTD SHANGHAI BRANCH BLDG9 3000 LONG DONG AVE PU DONG SHANGHAI 201203 CHINA
This is to certify that representative samples of	MEASURING, TESTING AND SIGNAL-GENERATION EQUIPMENT See Addendum page Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.
Standard(s) for Safety:	See Addendum page for Standards
Additional Information:	See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Listing Mark for the US and Canada should be considered as being covered by UL's Listing and Follow-Up Service meeting the appropriate requirements for US and Canada.
The UL Listing Mark for the US and Canada generally includes: the UL in a circle symbol with "C" and "US" identifiers: c UL us the word "LISTED"; a control number (may be alphanumeric) assigned by UL; and the product category name (product identifier) as indicated in the appropriate UL Directory.

Look for the UL Listing Mark on the product.

William R. Carney

William R. Carney, Director, North American Certification Programs

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at www.ul.com/contactus

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CERTIFICATE OF COMPLIANCE

Certificate Number	20131202-E360954
Report Reference	E360954-A1-UL
Issue Date	2013-DECEMBER-02

Energy Meter/Power Meter,
Energy Meter
iEM3100, iEM3110, iEM3115, iEM3135, iEM3150, iEM3155, iEM3165, iEM3175

iEM3200, iEM3210, iEM3215, iEM3235, iEM3250, iEM3255, iEM3265, iEM3275

Power Meter
PM3200, PM3210, PM3250, PM3255

Standard(s) for Safety:

UL 61010-1-ELECTRICAL EQUIPMENT FOR MEASUREMENT, CONTROL, AND LABORATORY USE - Part 1: General Requirements
CAN/CSA-C22.2 No. 61010-1-ELECTRICAL EQUIPMENT FOR MEASUREMENT, CONTROL, AND LABORATORY USE - Part 1: General Requirements

William R. Carney

William R. Carney, Director, North American Certification Programs

UL LLC

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3.4 Mikrotik

CE

DECLARATION OF CONFORMITY

We, **SIA Mikrotikls**
Brivibas gatve 214i
Riga, LV-1039
Latvia

declare that the products declaration of conformity is issued under the sole responsibility

Marketing name:	**hAP**
Description:	**WLAN 802.11b/g/n router**
Model:	**RouterBOARD 951Ui-2nD (RB951Ui-2nD)**

to which this declaration refers conforms with the relevant harmonized standards under Directive 2014/53/EU on RED:

Article 3.1.a (Safety):	**EN 60950-1:2006+A11:2009+A1:2010+A12:2011 +A2:2013**
Article 3.1.b (EMC):	**EN 301 489-1 V1.9.2 (2011-09)** **EN 301 489-17 V2.2.1 (2012-09)**
Article 3.2 (radio):	**EN 300 328 V2.1.1 (2016-11)**

Safety test report reference No. **032TP15** from SIA Latvian National Metrology Centre (K.Valdemāra 157, Rīga, LV-1013, Latvia), EMC test report reference No. **LEITC-TR-15-29** from Latvian Electronic Equipment Testing Centre (Azenes 12, Riga, LV-1048, Latvia), Radio test report references No. **(29.1) PB-88** from Equipment and Devices Electromagnetic Compatibility Control Division of Communications Regulatory Authority of the Republic of Lithuania (Zarasu g. 38, Kaunas, LT-44140, Lithuania).
A copy of the test report will be provided on request.

Riga, 28 November, 2018

Edmunds Zvegincevs,
engineer

(signature)

MikroTik

ID-054

3.5 Finder

[redacted]

TYPE APPROVAL CERTIFICATE
N. ELE133611CS004

This is to certify that the product below is found to be in compliance with the applicable requirements of the RINA type approval system.

Description	**ELECTRICAL RELAYS**
Type	**Series 46**
Applicant	**FINDER S.p.A** **Via Drubiaglio 14** **10040 Almese (TO)** **ITALY**
Manufacturer	**FINDER S.p.A** **Via Drubiaglio 14** **10040 Almese (TO)** **ITALY**
Testing Standards	**EN 61810-1: 2008**

Issued in **Genova** on **May 16, 2011**. This certificate is valid until **May 16, 2016**

RINA

Valerio Bonanni

Genova, May 16, 2011

1/2

RINA S.p.A.
Via Corsica, 12 – 16128 Genova
Tel. +39 010 53851
Fax +39 010 5351000

[redacted]

TYPE APPROVAL CERTIFICATE
N. ELE133611CS004

Series 46

Miniature relays Series 46.52.8.XXX.XXXX (*1)_ 2 Poles
Miniature relays Series 46.52.9.XXX.XXXX (*2)_ 2 Poles

Rated values	250 Vac 8 A ; 30 Vdc 6 A (L/R=0)
Ambient temperature	-40 +70 °C
Type of operation	Continuous
Electrical operating cycles	100.000
Coil Insulation class	F
Coil control Vac range	6 to 240 Vac - 1,1VA (*1)
Coil control Vdc range	5 to 125; Vdc - 0,5 W (*2)

Miniature relays Series 46.61.8.XXX.XXXX (*3) _1 Pole
Miniature relays Series 46.61.9.XXX.XXXX (*4) _1 Pole

Rated values	440 Vac 10A; 250 Vac 16A; 30Vdc 12A (L/R=0)
Ambient temperature	-40 +70 °C
Type of operation	Continuous
Insulation class of coil	F
Electrical operating cycles	100.000 or 50.000 (according to contact material)
Coil control Vac range	6 to 240 Vac - 1,1 VA (*3)
Coil control Vdc range	5 to 125 Vdc - 0,5 W (*4)

Test reports
IMQ n. CA02.24030 (29/06/2005) updated on 07 /02/ 2011.
IMQ n. CA02.24031 (29/06/ 2005) updated on 07 /02/ 2011.
IMQ n. 02LJ00038 (30/11/2009)
IMQ n. 02LJ00038/1 (30/11/2009)

Technical documents
FINDER general catalogue.

Remarks
Electrical devices to be used according to the manufacturer instructions.

Genova, May 16, 2011 **2/2**

RINA S.p.A.
Via Corsica, 12 – 16128 Genova
Tel. +39 010 53851
Fax +39 010 5351000