

AGNEUS
AGCU840W48HV
700mA boost Power LED driver

DC/DC Voltage Step-Up dimming power LED driver
User's Manual
READ BEFORE TO INSTALL

General Description

AGNEUS AGCU840W48HV is an innovative constant current power LED driver specially designed for 24V battery powered street lighting points. Operates as an step-up dc/dc converter, so input voltage is boosted till load (LED) reaches 700mA of constant current supply.

AGNEUS AGCU840W48HV is designed for LED lamps where the operating voltage will be always found from 30V to 50V: this voltage range is usual in 12-LED or 16-LED serial string lamps.

AGNEUS AGCU840W48HV is fully dimmable using classical switching-mode techniques. Switching-mode dimming controllers allows to get the maximum light efficiency of LED lamp: for this reason, in solar street lighting is highly recommended to use in combination with AGNEUS AGPC1040S Dimmer Light Controller Plus:



figure 1 – LED solar street lighting using AGNEUS AGCU840W48HV and AGPC1040S DLC+

AGNEUS AGCU840W48HV is hermetically sealed, so it could be used in outdoor systems. Internal robust construction include protections for output short-circuit, overcharge, input undervoltage and input voltage inverting,

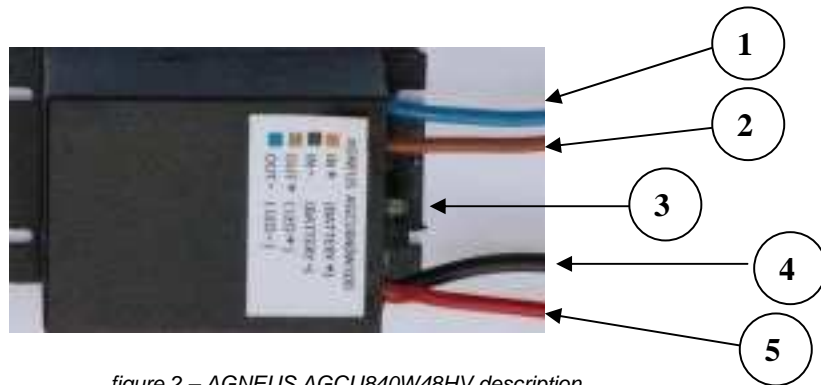


figure 2 – AGNEUS AGCU840W48HV description

1. **OUT-** negative output LED wire (blue)
2. **OUT+** positive output LED wire (brown)
3. **Power ON indicator**
4. **IN-** negative input supply wire (black)
5. **IN+** positive input supply wire (red)

Technical Specifications - AGNEUS AGCU840W48HV				
Specification	Nominal	Maximum	Minimum	
Input voltage	24V	27V	22V	
Output Voltage	44V	50V	30V	
Output Power	30W	33W	20W	
Output current	0,7A	0,71A	0,67A	
Output Voltage (no load)	55V	57V	54V	
Self consumption	1,5W	2W	0,1W (no load)	
Efficiency	94%	95%	93%	
Temperature	25°C	60°C	-15°C	
General data – AGNEUS AGCU840W48HV				
Dimensions (width x height x deep) & weight	75,5mm x 28mm x 45mm		300 gr.	
Kind of regulation	Constant current Step-Up DC/DC converter			
Dimming LED lamp	YES			
Dimming switching-pulse width	1ms minimum pulse width			
Dimming patterns	25%, 50%, and 75% are fully tested and recommended			
Load Control	Cut-off output over-voltage & input low-voltage			
Device protections	Low Input voltage	Input & Output polarity	overcharge	short circuit
Case protection degree	IP67 (waterproof)			