



## IO-Power IOP-DBBV-I12O20-1

### Outdoor Buck / Boost Voltage Converter

12~30V input DC voltage, through automatic Buck / Boost Voltage Converter  
to automatically Lifted / Reduced output voltage in 20VDC



IOP-DBBV-I12O20-1 is special design for the 12VDC~30VDC input voltage DC power supply, through automated buck / boost voltage converter, automatic Lifted / Reduced voltage stabilized output voltage is 20VDC, particularly suitable for the following applications:

1. General Motors' output 12VDC cigarette lighter DC power: Through automated buck-boost voltage converter to automatically lifted/ reduced output voltage as 20VDC, in order to stability charge the Automotive DC UPS power system.
2. General large vehicles (Buses, Trucks, Container Trucks ...) engine generator output the 24~28VDC power: through automated buck-boost voltage converter to automatically reduced output voltage as 20VDC, In-Vehicle to stability charge the car DC UPS power system.



3. The car cigarette lighter output 12VDC power: Through automated buck-boost voltage converter to automatically lifted output voltage as 20VDC, in-car power booster to power supply for laptop PC or use 18~20 (24) VDC power devices or DC power Ethernet switch (DC PoE-PSE Switch).

4. Via mobile power back up unit (including outdoor DC UPS mobile back up power system) output 12VDC power: Through automated buck-boost voltage converter to automatically lifted output voltage as 20VDC, power supply for laptop Pc or use 18~20(24) VDC power voltage devices, to carry out the long-term redundant power supply, especially for outdoor backup power applications。 For example: camper vehicle use mobile power, Outdoor camping camper use back up power, power supply for surveillance system outdoor test, outdoor wireless transmission system outdoor test ... , And so on.

5. Mix of solar panels (Solar Panel), use solar panels output 12VDC~30VDC voltage power source, through automated buck-boost voltage converter to automatically lifted/ reduced output voltage as 20VDC, to stability charging Solar DC UPS power systems. (Mix mobile Solar Soft Board, composed of mobile solar power systems)

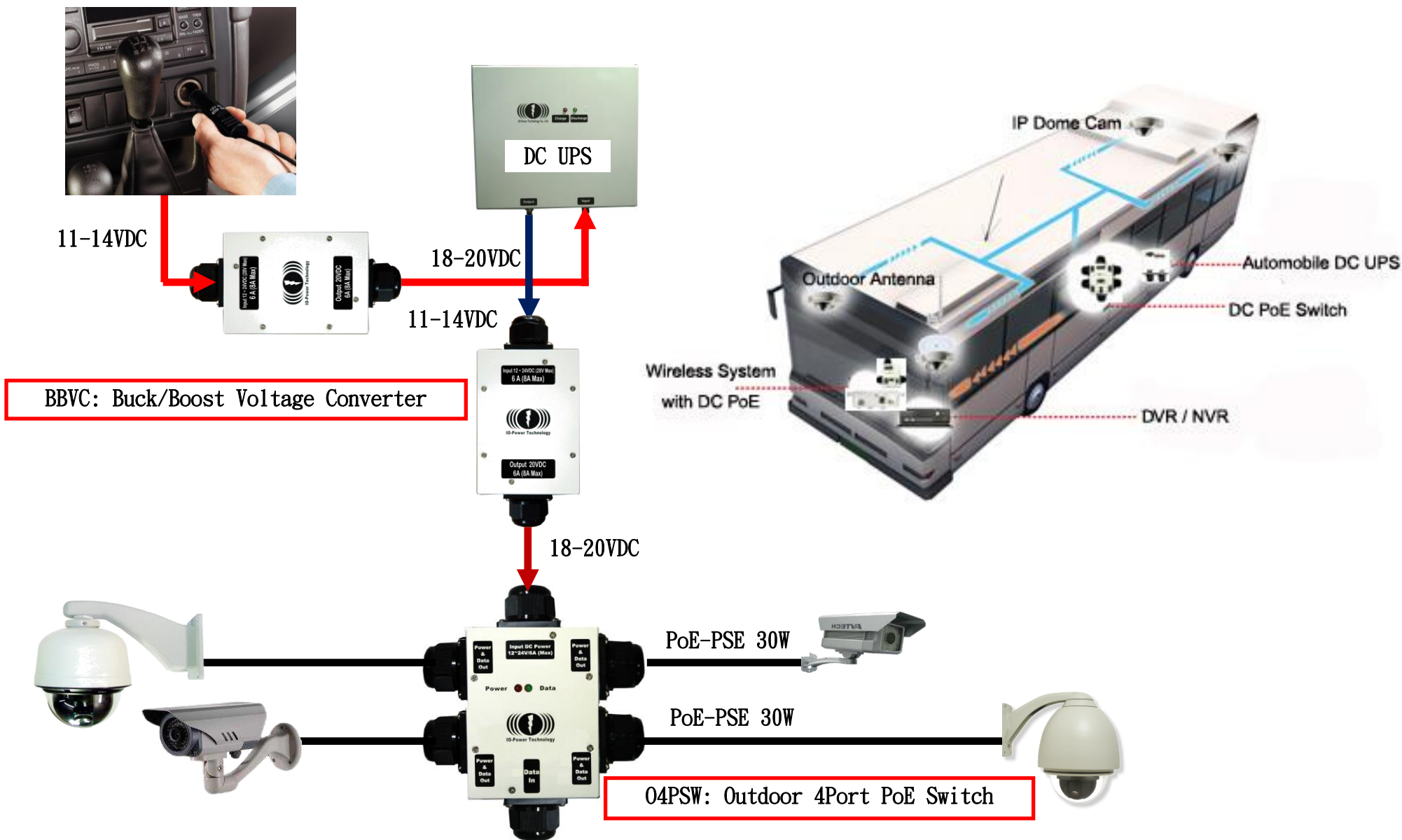
6. Matching transformer 12VDC, through automated buck-boost voltage converter to automatically lifted output voltage as 20VDC, to charging outdoor DC UPS power systems.

IOP-DBBV-I12O20-1 buck-boost voltage converter design input current maximum sustainable 8A @ 12VDC, 5A @ 20VDC maximum output current of electronic circuitry, are required for car-side (cigarette lighter) power supply current limiter function and design of leakage-proof circuits, reach the output power with a large load of vehicle power system security.

Enhanced Crashworthiness metal case with IP67 water and dust proof design and affordable product temperature design -40 ~ + 70 °C, even if they are placed in the sunshine hot car environment remains normal and stable work.

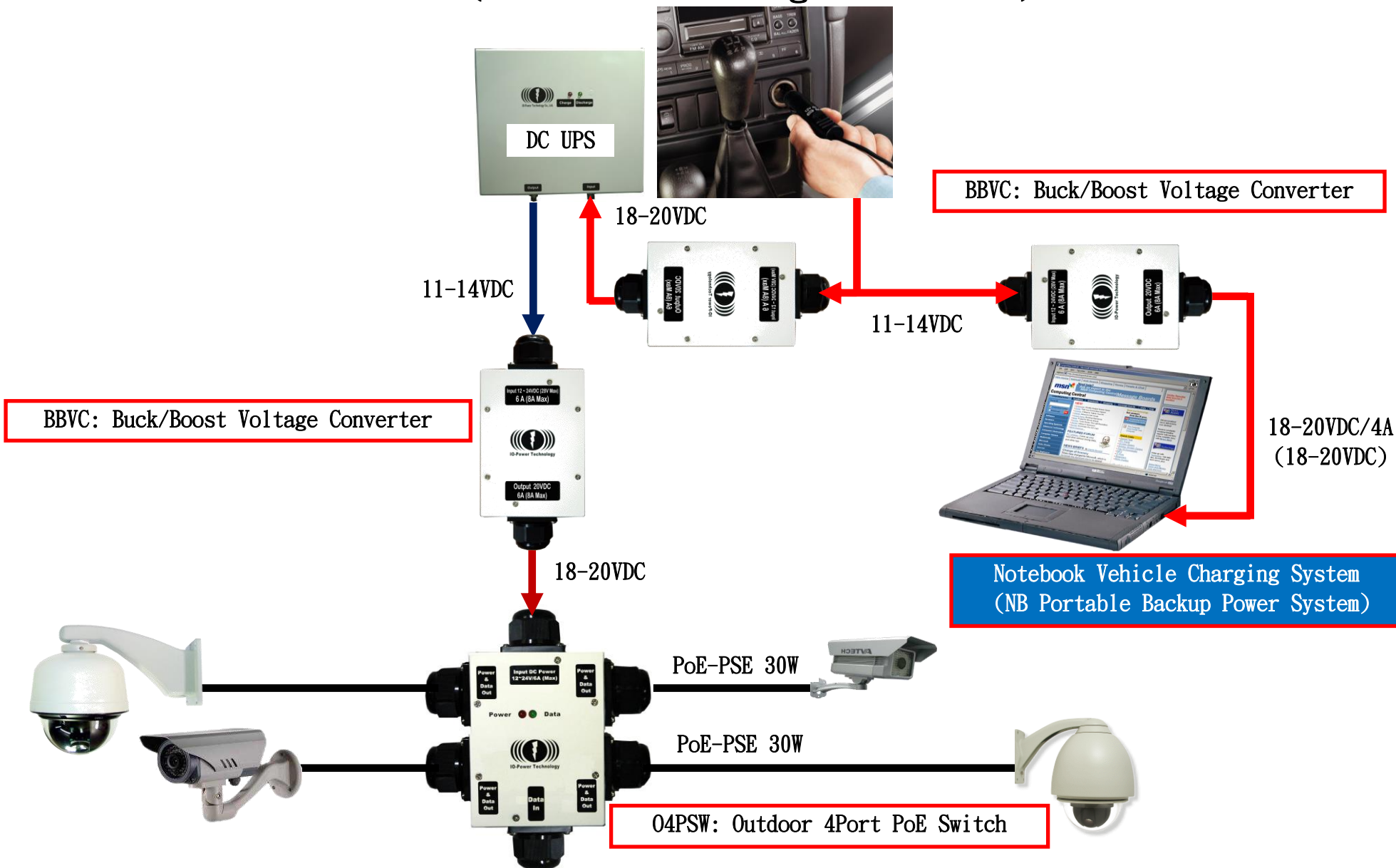


## BBVC (Buck/Boost Voltage Converter)






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## IOP-DBBV-I12O20-1 Specification

Model	IOP-DBBV-I12O20-1
<p>Buck/Boost Voltage Converter (BBVC)</p> <p>Iron Airtight Housing IP 66</p>	
Input DC Voltage	12~24VDC (30V Max)
Input DC Current	12VDC 6A (8A Max) / 24VDC 6A (8A Max)
Output DC Voltage	18~20VDC (Option 24VDC~30VDC)
Output DC Current	4A (5A Max)
Output Power Consume Watts	72W ~ 100W Max (Option 144W Max)
Input DC Power Connector	DC Jack Connector 5.1mm/2.1mm
Output DC Power Connector	DC Jack Connector 5.1mm/2.1mm
Transform Efficiency	90%~



<b>Protection</b>	Input power overcurrent protection Input power supply over low voltage protection Input power supply over high voltage protection Output power overcurrent protection Short circuit protection Imported power polarity protection for anti-welding Surge protect for each port (30V 1500W)
<b>Industrial Housing &amp; Connector</b>	Iron Airtight Housing IP 67 Gland Connector
<b>Connector Type</b>	Input DC Power: 12VDC 6A (8A Max) / 24VDC 6A (8A Max), DC Jack Output DC Power: 18~20VDC (Option 24VDC~30VDC) / 4A (5A Max), DC Jack
<b>LED Display</b>	Input DC Power Port: 1 Green Color LED Output DC Power Port: 1 Red Color LED
<b>Operating Temperature</b>	-40°C ~ +70°C (Use or storage at -40°C environment, please be sure to inform in advance, related accessories and wires should be replaced; Recommends that the equipment will be installed in the power distribution box)
<b>Storage Temperature</b>	-40°C ~ +70°C (Use or storage at -40°C environment, please be sure to inform in advance, related accessories and wires should be replaced)
<b>Rel. Humidity</b>	10~95%RH
<b>Dimension</b>	195mm(L)x92mm(W)x48mm(H)
<b>Weight</b>	0.5Kg



<b>Housing Waterproof</b>	IP67
<b>Approvals</b>	CE FCC in progress
<b>Installation</b>	1.Street lamp pole mount or Upright pole mount 2.Wall mount installation
<b>Warranty</b>	12 months

Ps 1: Product specifications change, without notice, consultation with agent or dealer before buying the latest specifications