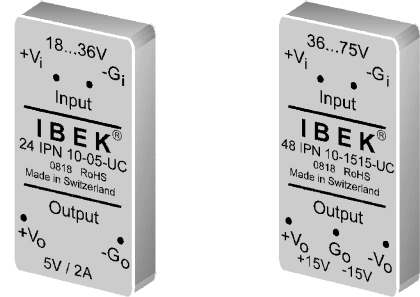


**Single & double outputs**  
**Input to output isolated**

- Wide 1:2 input voltage ranges
- Shutdown input (optional)
- Very high efficiency up to 85%
- Low output voltage noise
- Continuous no-load and short-circuit proof
- 2" x 1" x 0.41" case with industrial standard pinning
- No derating
- Made in Switzerland, accordingly ISO 9001:2000
- 2 years warranty



**Electromagnetic emission EN 55022 < A**  
Conducted and radiated emissions

	12 IPN	24 IPN	48 IPN	
No load input current	20	15	10	mA typ.
Input current in shutdown condition	1.3 mA typ.			
Switching frequency	400 kHz typ.			
Output voltage accuracy	± 1% max.			
Static line regulation	± 0.3% typ.			
Static load regulation FL to 10%	0...0.5% typ.			
Output voltage noise (20 MHz BW)	50 mVpp typ. <sup>1</sup>			
Efficiency	79% to 85% typ.			
I/O Electric strength test voltage	1500 VDC			
Coupling capacitance	1000 pF			
Shutdown input (SD) :	Apply -0.3...+0.6 VDC to shut down (switch off) the output voltage(s). Normal operation with open pin.			
Ambient temperature range	-40...+65°C			
Case temperature range	-40...+100°C			
Storage temperature range	-55...+105°C			
Case material	Metal with plastic bottom cover, UL94 V-0 rated			
MTBF, GB @ 40°C case	> 1.500.000 hours			
(MIL-HDBK-217F, Notice 2)				

Standard Types <sup>2</sup>	Input voltage VDC	Output	
		VDC	mA
Single output	9...18 (nominal 12)	3.3	2400
xx IPN10-03-UC RoHS		5	2000
xx IPN10-05-UC RoHS		12	833
xx IPN10-12-UC RoHS		15	667
Double output <sup>3</sup>	18...36 (nominal 24)	± 5	± 1000
xx IPN10-0505-UC RoHS	36...75 (nominal 48)	± 12	± 417
xx IPN10-1212-UC RoHS		± 15	± 333
xx IPN10-1515-UC RoHS			

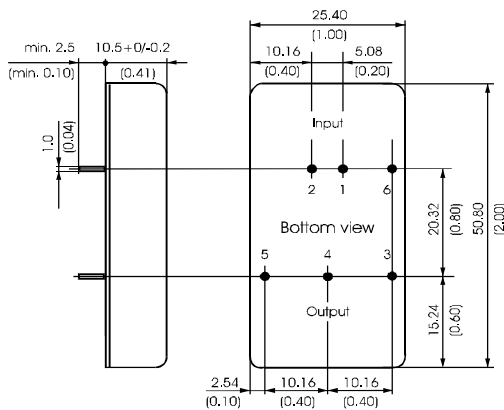
<sup>2</sup> To complete type number replace "xx" by the required nominal input voltage, e.g. 24 IPN10-05-UC RoHS.

<sup>3</sup> Double outputs should have symmetrical load conditions to comply with the specifications listed on the left side.

Modifications and customs are available upon request.

<sup>1</sup> The negative (-) line of a double output unit requires two multi-layer ceramic capacitors of 0.47µF installed across the output pins to achieve this value.

Dimensions in mm (inches)



Pin Configuration		
Pin	Single output	Double output
1	+Vi	+Vi
2	-Gi	-Gi
3	+Vo	+Vo
4	No pin	Go
5	-Go	-Vo
6 <sup>4</sup>	SD	SD

<sup>4</sup> Optional shutdown pin. If required replace C by G on type number, e.g. 24 IPN10-05-UG RoHS.