

SIMPLE AND SAFE CONNECTION OF PHOTOVOLTAIC STRINGS

160 / 240 / 320

The new INGECON® SUN StringBox is a cost-effective PV string combiner box series designed for central inverter-based PV systems. The INGECON® SUN StringBox features efficient input and output DC wiring with fully rated DC disconnect switches for safe maintenance.

When used in combination with INGECON® SUN PowerMax central inverters, the INGECON® SUN StringBox outputs can be monitored by means of the optional DC input groups monitoring kit available for B, X and M series.

MAIN FEATURES

- Built to minimize system costs by providing the maximum flexibility.
- Available in 16, 24 and 32 input configurations.
- Rated for 1,000 Vdc or 1.500 Vdc maximum voltage.
- Simplifies input and output wiring.
- Capability to connect up to 2 DC output cables per polarity.
- IP65 protection rating.
- Maximum protection to corrosion and pollution thanks to the isolating polyester enclosure reinforced with fiberglass.

A complete range of equipment for all types of projects

Available in models ranging from 16 to 32 inputs and from 1,000 to 1,500 Vdc, the INGECON® SUN StringBox provide the maximum flexibility and expandability in system design. The compact and rugged IP65 enclosure is designed for installation in outdoor environments, such as roof-mounted systems and large-scale solar farms.

Maximum protection

The INGECON® SUN StringBox combiner boxes are equipped with touch-safe DC fuse holders, DC fuses, lightning induced DC surge arresters and load disconnect switch.

PROTECTIONS

- Up to 32 pairs of DC fuses.
- Lightning induced DC surge arresters, type 2.
- Manual DC isolating switch.

OPTIONAL ACCESSORIES

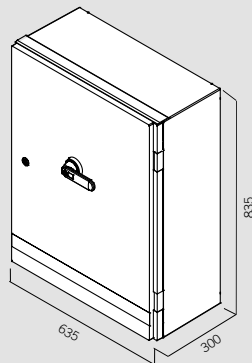
- Lightning induced DC surge arresters, type 1.



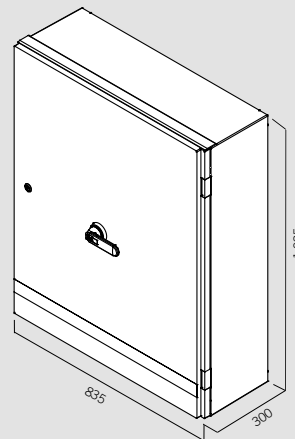
	1,000 V			1,500 V		
	StringBox 160	StringBox 240	StringBox 320	StringBox 160	StringBox 240	StringBox 320
Input						
Maximum number of input strings	16	24	32	16	24	32
Rated current per string	10 A	10 A	10 A	10 A	10 A	10 A
Maximum current per string	12 A	12 A	12 A	12 A	12 A	12 A
Number of protection fuses	2 x 16	2 x 24	2 x 32	2 x 16	2 x 24	2 x 32
Type of fuses	gPV fuses, 10 x 38 mm, 30 kA			gPV fuses, 10 x 85 mm, 30 kA		
Maximum DC voltage	1,000 V			1,500 V		
Inlet connections	M32 cable glands (n.4 cables entry diameter: 3.5 to 7 mm for each cable gland) with Direct connection on fuse holders			M32 cable glands (n.4 cables entry diameter: 3.5 to 7 mm for each cable gland) with Direct connection on fuse holders		
Output						
Rated total current	160 A	240 A	320 A	160 A	240 A	320 A
Maximum total current ⁽¹⁾	192 A	288 A	384 A	192 A	288 A	360 A
Outlet connections	Up to 2 pairs of M50 cable glands (cable diameter: 27 to 35 mm) with direct connection on copper plates			Up to 2 pairs of M50 cable glands (cable diameter: 27 to 35 mm) with direct connection on copper plates		
DC switch disconnect rating	200 A	315 A	400 A	315 A	315 A	400 A
Grounding						
Grounding connection	M16 cable gland (cable diameter: 4.5 to 10 mm)			M16 cable gland (cable diameter: 4.5 to 10 mm)		
General Information						
Enclosure type	Outdoor use, insulating cabinet (polyester reinforced with fiberglass)			Outdoor use, insulating cabinet (polyester reinforced with fiberglass)		
Protection rating	IP65			IP65		
Impact strength	IK10			IK10		
Operating temperature range	-20 °C to +55 °C			-20 °C to +55 °C		
Relative humidity (non-condensing)	0 to 100%			0 to 100%		
Maximum altitude ⁽²⁾	2,000 m a.s.l.			2,000 m a.s.l.		
DC switch handle	External (front) access, lockable in open position			External (front) access, lockable in open position		
Consumption	0 W			0 W		
Weight	27 kg	43 kg	44 kg	32 kg	46 kg	48 kg
Marking	CE					
LV Switchgear standards	IEC 61439-1, IEC 61439-2					
Electric shock protection	Class II equipment					

Notes: ⁽¹⁾ Over 50 °C ambient temperature, the current will be reduced at the rate of 3.5% every °C up to 55°C. ⁽²⁾ Please contact Ingeteam for altitudes higher than 2,000 m.

Size (mm)



StringBox 160



StringBox 240 / 320