

## AC Trunk Cable System

### GENERAL CHARACTERISTICS OUTDOOR MODELS

#### Product Description

The AC-TRUNK cable is a 4 mm<sup>2</sup> cross section cable, homologated for outdoor applications, with preinstalled connectors for Power-One microinverters.

#### Robust

- Designed to withstand even very intense operating conditions, they guarantee maximum mechanical, chemical and UV resistance.
- Once connected to the micro-inverters or terminated using the specific water-tight caps, AC-TRUNK cable connectors guarantee IP68 environmental protection grade.

#### Flexible

- It is possible to select up to three models of AC-TRUNK cable, with different distances between one connector and the next, depending on the module type and their method of installation (horizontal or vertical).
- Thanks to the broad temperature range (-40°C...+90°C in fixed installations) and the high mechanical strength, there are no particular restrictions on the type of installation, thus guaranteeing high installation flexibility.

#### Simple

- Power-One microinverters are connected directly to AC-TRUNK cable connectors without using special tools.
- The AC accessories complete the range, making it possible to create extension cables, terminations and connections to other cables, simplifying the installation of small and large systems alike.

## Technical Specifications

#### TECHNICAL SPECIFICATIONS OF THE CABLE

Number of Conductors and cross section	3G4 mm <sup>2</sup>
Minimum radius of curvature for fixed installation	48 mm
Operating temperature (mobile installation)	-40°C...+90°C
Rated Voltage U0/U	450/750 V/V
Specific resistance of the insulation	>10 GOhm x cm
Test voltage	3000 V
External sheathing	Black PUR
Cable type	H07BQ-F

#### SPECIFICATIONS OF THE CONNECTORS

Operating temperature	-40°C...+90°C
Protection class	IP68
Connector rated current for MICRO inverter connection	5 A
Connector rated voltage for MICRO inverter connection	300V
Extension connector rated current	25 A
Extension connector rated voltage	660 V

## COMPONENT CODES

CODE	DESCRIPTION
<b>AC-TRUNK-BUS-1.05m-4plus-3x4mm<sup>2</sup></b>	AC cable 3 4 mm <sup>2</sup> conductors; distance between connectors 1.05m/41"



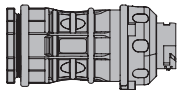
<b>AC-TRUNK-BUS-1.70m-4plus-3x4mm<sup>2</sup></b>	AC cable 3 4 mm <sup>2</sup> conductors; distance between connectors 1.70m/67"
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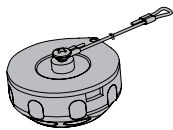
<b>AC-TRUNK-BUS-2.05m-4plus-3x4mm<sup>2</sup></b>	AC cable 3 4 mm <sup>2</sup> conductors; distance between connectors 2.05m/81"
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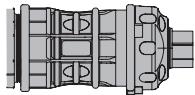
<b>AC-TRUNK-BUS EXTENSION-male-3pins</b>	Male connector for AC bus cable extension
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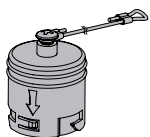
<b>AC-TRUNK-EXTENSION CAP-male-3pins</b>	Sealing cap for AC-TRUNK-BUS EXTENSION-male-3pin connectors
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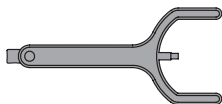
<b>AC-TRUNK-BUS EXTENSION CAP-female-3pins</b>	Female connector for AC bus cable extension
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<b>AC-TRUNK-EXTENSION CAP-female-3pins</b>	Sealing cap for AC-TRUNK-BUS EXTENSION-female-3pins
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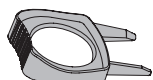
<b>AC-BUS-EXTENSION UNLOCK TOOL (included with AC-TRUNK-BUS EXTENSION-female-3pins)</b>	Tool for unlocking AC cable EXTENSION connectors
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<b>AC-TRUNK PLUG CAP</b>	Sealing cap for AC cable connectors (female)
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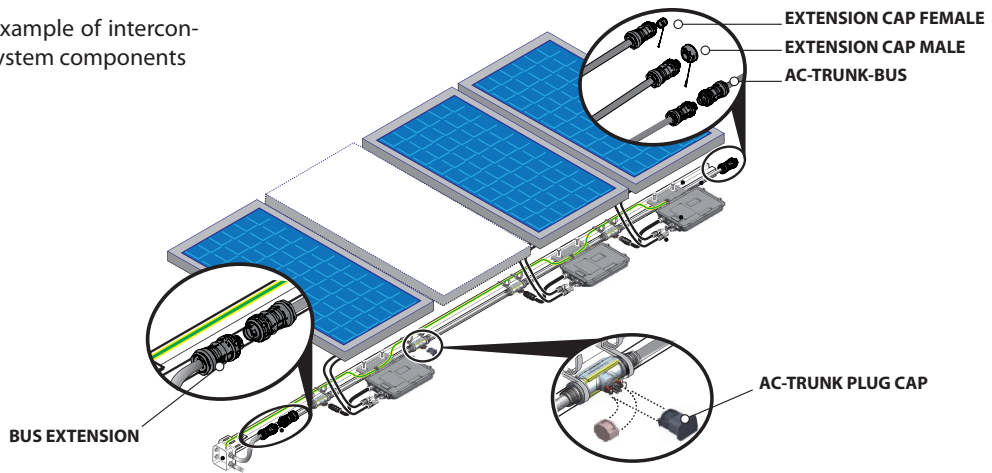


<b>AC-TRUNK UNLOCK TOOL</b>	MICRO inverter and PLUG CAP connector unlocking tool
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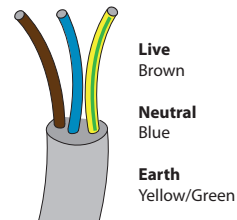
## CONNECTIONS

Below is a practical example of interconnecting **AC-TRUNK** system components

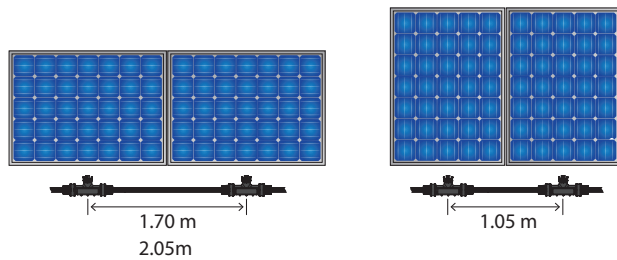


## PRACTICAL SUGGESTIONS

The Power-One **AC-TRUNK-BUS** cable has 3 conductors with different colours identifying their function.

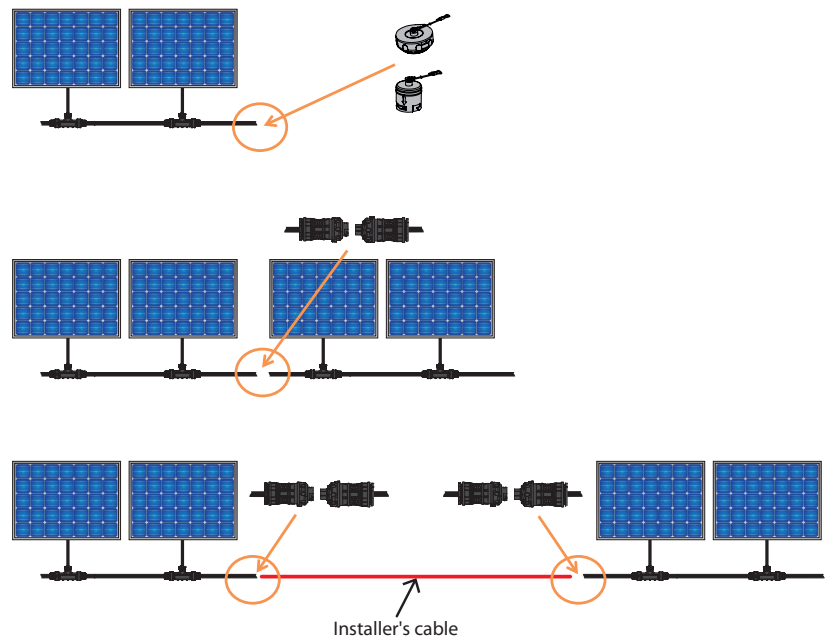


The installer has the option of choosing between several **AC-TRUNK-BUS** cables, with varying lengths between the connectors, depending on the size and positioning of the panels (horizontal or vertical).



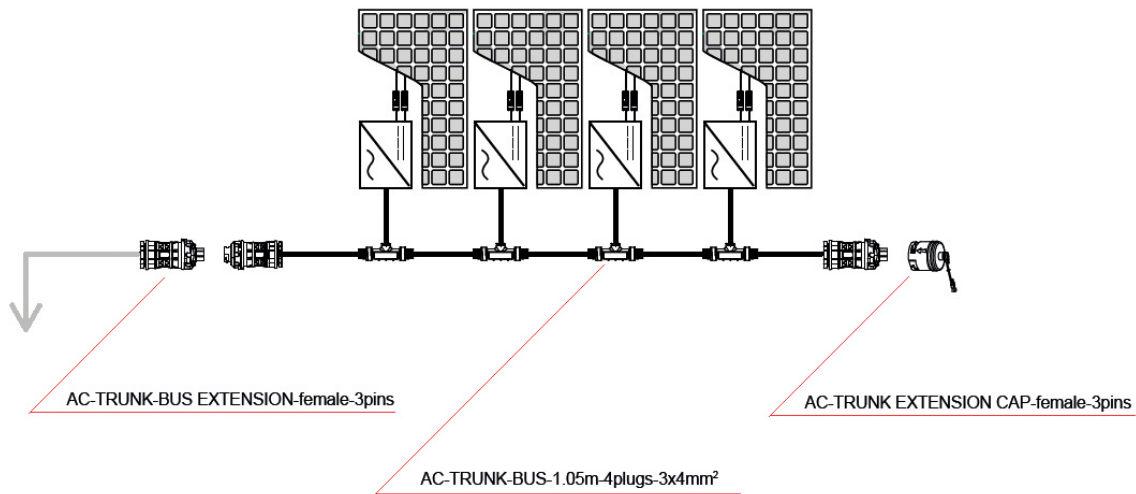
Each **AC-TRUNK-BUS** cable has connectors at the ends which can be:

- Terminated using specific **EXTENSION CAPS**.
- Connected to other Power-One **AC-TRUNK-BUS** units.
- Used to create extensions thanks to the **AC-TRUNK-BUS EXTENSION** counterparts:



## EXAMPLE ASSEMBLY AND BASIC SPECIFICATION CREATION

1 kW plant with 4 MICRO-0.25-I-OUTD-230



Code	Quantity
MICRO-0.25-I	4
PVI-CDD	1
AC-TRUNK-BUS-1.05m-4PLUGS-3x4mm <sup>2</sup>	1
AC-TRUNK-BUS-1.70m-4PLUGS-3x4mm <sup>2</sup>	0
AC-TRUNK-BUS-2.05m-4PLUGS-3x4mm <sup>2</sup>	0
AC-TRUNK PLUG CAP	0
AC-TRUNK UNLOCK TOOL	0
AC-TRUNK-BUS EXTENSION-MALE-3PIN	0
AC-TRUNK-BUS EXTENSION-FEMALE-3PINS + AC-BUS-EXTENSION UNLOCK TOOL	1
AC-TRUNK-EXTENSION CAP-MALE-3PINS	0
AC-TRUNK-EXTENSION CAP-FEMALE-3PIN	1



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