

## **TS4-A-O** PV Module Advanced Add-On

The TS4-A-O (Optimization) is the advanced add-on optimization solution that brings smart module functionality to standard PV modules for higher reliability.

Improve energy efficiency by upgrading underperforming PV systems or adding smart features to new installations. TS4-A-O supports PV modules up to 700Wp.

#### Features:

- Module-level **optimization** for increased energy yield and greater design flexibility;
- Automatic or manual **shutdown**;
- Module-level **monitoring** for energy production tracking and system management;
- **Easy installation**, attachable to the module frame or mounting system;
- Smart Commissioning, configuration and commissioning achievable from Android/iOS device.

### **Dimensions:**

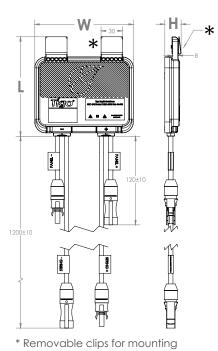
Width: 138.4 mm Height: 22.9 mm Depth: 139.7 mm Weight: 520 g





Model	TS4-A-0
TECHNICAL DATA	
Energy Product code	90900700
Max. Power [W]	700
Max. Input Voltage (Vac at the lowest temperature) [V]	80
Voltage Range [V]	16~80
Max. Current [A]	15
Recommended Fuse rating [A]	30
GENERAL DATA	
Dimensions [WxHxD] [mm]	138.4x22.9x139.7
Weight [g]	520
Operating Temperature range [°C]	-40 ~70 (-40°F~158°F)
Protection degree	IP68
Altitude [m]	2000
Output cable Lenght [m]	1.2 (standard)
Connectors	MC4, EVO2
Communication	Wireless
Standard	CE, TÜV
Warranty [years]	2

N.B: For monitoring and security functions you must purchase the Kit Cloud Connect Tigo (COD. 90900720) complete with datalogger, Access Point (TPA) and DIN mounted power supply.



Frame Thickness Range 1.2mm - 3mm

Assembly instructions TS4-A







# KIT COMPOSITION Cloud Connect Advanced (CCA)

## Compact Datalogger

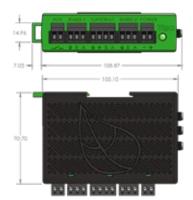
The Cloud Connect Advanced (CCA) is a compact, powerful data logger and the communication hub of the Tigo SMART platform. It powers the monitoring and safety capabilities of Tigo smart modules.

## Features:

- Collect data from up to 900 TS4 units;
- Supports wired and wireless networks;
- Control monitoring and safety features;
- Configure and commission with Tigo SMART App;
- Monitor 3rd party devices via Modbus (inverters, charge controllers, weather stations, and revenue grade meters...);
- Control the rapid shutdown function.



Model	CCA	POWER SUPPLY	
TECHNICAL DATA			
Energy Product code	Complete kit: 90900720		
Input Voltage [V]	10~25 Vdc	100 ~ 240 Vac	
Power Consumption [W]	3~7 -		
CCA Capacity	Each CCA supports up to 900 TS4 units and up to 7 TAPs	-	
GENERAL DATA			
Dimensions [WxHxD] [mm]	31x71.54x115.51 (CCA only)	-	
Weight [g]	126 (CCA only)	-	
Operating Temperature range [°C]	-20°C~70°C (-4°F~158°F) (CCA only)	-	
Protection degree	IP68, Type 4R (if installed in outdoor boxes)	-	
Cooling	Natural Convection	-	
Led Status	Multi-function LED status indicator	-	
Communication	Mobile App: Tigo SMART App for Android and iOS -		
Standard	CE, FCC, CSAus		
Warranty [years]	2		







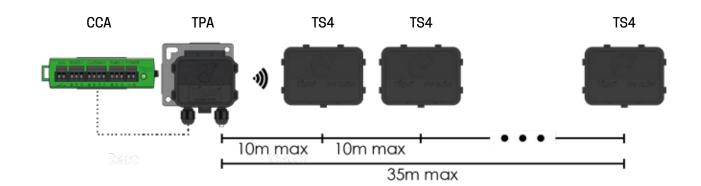
## **Tigo Access Point (TPA)**

### Features:

- Collect data from up to 300 TS4 units;
- Wireless MESH communication;
- High definition sampling rate;
- Scalable architecture;
- Mounts easily on module frame without tools.



Model	ТРА
TECHNICAL DATA	
Energy Product code	90900730
TPA Capacity	Each TAP supports up to 300 TS4 units up to $115$ ft ( $35$ m) away
GENERAL DATA	
Dimensions [WxHxD] [mm]	126.2x26.8x130 (with bracket)
Weight [g]	227
Operating Temperature range [°C]	-20°C~+85°C (-4°F~185°F)
Protection degree	IP68, Type 4R
Standard	CE, FCC, CSAus
Warranty [years]	2



Product Code Kit Cloud Connect Tigo (CCA+TPA+DIN): 90900720

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