

Announcing Fluke's First eMobility Product

NEW FEV300 Electric Vehicle Charging Station Adapter

Test and troubleshoot functionality and safety of Level 1 or Level 2 AC electric vehicle supply equipment, easily and reliably

The FEV300 electric vehicle charging station test adapter simulates the presence of an electrical vehicle, allowing the user to conduct safety and functionality tests in combination with appropriate test instruments such as an installation multifunction tester, digital multimeter or oscilloscope. Use the FEV300 for station installations and to verify the station is working properly after install, during periodic maintenance, or troubleshooting an if the station is not delivering the appropriate charge.

Perform a variety of tests including ground fault checks, insulation of wires, voltage and duty cycle to see max current available for charging all in one adapter. The FEV300 is suitable for AC charging stations with charging mode 3 and connectors type 2 and type 1.



Value Proposition

For...	Electricians that install or perform maintenance of EV stations (level 1, 2 – residential and level 3 – outdoors/commercial) (operations & maintenance)
Project is...	An integrated EV charging station testing portfolio
That...	Troubleshoots the station and its installation. Works/acts as a test and measurement adapter for installation multifunction testers, multimeters, oscilloscopes, and other critical Fluke testing tools.
That's because...	<p>Provides critical safety and performance testing to a charging station:</p> <ul style="list-style-type: none"> • Suitable to vehicle charging stations with charging mode 3 • Proximity pilot state (“Cable Simulation”) • Control pilot state (“Vehicle Simulation”) • L1, L2, L3, N and PE measuring terminals • Simulation of CP error “E” and PE Error (“Earth fault”)



Features and Functions

- **EV-adapters for type 2 and type 1 connectors**
- **PE Protective Earth Pre-Test:** verifies there is no presence of dangerous voltage at the ground terminal.
- **CP Control Pilot Simulation:** simulates communication and variable charging rate control vehicle signals that allow transfer from the station to the vehicle.
- **PE and CP Error:** simulates Control Pilot (CP) signal short-circuited to Protective Earth (PE) and an interruption of PE conductor.
- **Proximity Pilot (PP):** With PP State rotary switch the adapter can simulate various current capabilities of charging cables.
- **Separate phase indication by three LED lamps:** easy check if voltage is present.
- **L1, L2, L3, N and PE measuring terminals:** five 4 mm safety sockets for connection to Installation Testers (for example, Fluke 166x series). This allows safety measurements via the measuring terminals like: earth bond- insulation, loop/line impedance, RCD trip test.
- **Terminals for CP signal output to check communication between adapter and charging station:** use a Fluke ScopeMeter® to measure voltage levels of CP signal and obtain duty cycle for the signal defining the charging current.
- **IP 54 rating:** Limited dust ingress and water splashing protection.
-



Technical specifications

General specifications	
Input voltage	Up to 250 V (single phase system) / up to 480 V (three phase system), 50/60 Hz, max 10 A
EV connector (Type 2)	AC charging mode 3, suitable to IEC 62196-2 type 2 socket outlet or fixed cable with vehicle connector (type 2, 7P three-phase)
EV connector (Type 1)	AC charging mode 3, suitable to IEC 62196-2 type 1 or SAE J1772 with vehicle connector (type 1, 5P single-phase)
Operating temperature	-20 °C to 40 °C (-4 °F to 104 °F)
Storage temperature	-20 °C to 50 °C (-4 °F to 122 °F)
Operating humidity range	10 % to 85 % relative humidity non-condensing
Storage relative humidity	0 % to 85 % non-condensing
Dimensions (H × W × D)	Approx. 8.66 x 4.33 x 1.77 in (220 x 110 × 45 mm) without cable assembly
Weight	Approx. 2 kg (4.4 lb.)
Safety standards	IEC 61010-1, Pollution Degree 2 IEC 61010-2-030 IEC/EN 61851-1
Measurement category	CAT II 250 V
IP protection class	IP54
Functions	
PE Pre-Test	Yes, with touch electrode
PP simulation open	13 A, 20 A, 32 A, 63 A
CP states	A, B, C, D
CP Error "E"	"E" simulation (CP signal short-circuited to PE) – push button.
PE Error (Earth fault)	"F" (Earth Fault) simulation (interruption of PE conductor) – push button.
Outputs (for test purpose only)	
Measuring terminals L1, L2/N, PE	Max. 250/480 V, CAT II 300 V, max. 10 A
CP signal output terminals	PWM communication protocol, approx. max. ±12 V

Pricing

Fluke model	Description	P/N	Pricing						
			EUR	GBP	NOK	SEK	DKK	EMEA USD	CHF
FLK-FEV300/TY2	TEST ADAPTER EV CHARGING W/TYPE 2 PLUG, INTL	5347987	959	862	9693	10126	7160	1078	1081
FLK-FEV300/TY1 & TY2	TEST ADAPTER EV CHARGING W/TYPE 1 & 2 PLUG, INTL	5347993	1099	988	11108	11604	8205	1235	1239
FLK-FEV300-CON-TY1	TYPE 1 PLUG FOR TEST ADAPTER EV CHARGING, INTL	5348138	380	342	3841	4012	2837	427	428
FLK-FEV300-CON-TY2	TYPE 2 PLUG FOR TEST ADAPTER EV CHARGING, INTL	5348123	370	333	3,740	3,907	2,762	416	417
FLK-FEV300/BASIC	TEST ADAPTER EV CHARGING, INTL	5348008	600	539	6064	6335	4480	674	676
FLK-FEV300/KIT UK	TEST ADAPTER EV CHARGING W/TYPE 2 PLUG & 1664FC UK	5363606	N/A	2518	N/A	N/A	N/A	3146	N/A
FLK-FEV300/KIT SCH	TEST ADAPTER EV CHARGING W/TYPE 2 PLUG & 1664FC SCH	5363614	2800	N/A	28300	29564	N/A	3146	N/A
FLK-FEV300/KIT FR	TEST ADAPTER EV CHARGING W/TYPE 2 PLUG & 1664FC FR	5363623	2800	N/A	N/A	N/A	N/A	N/A	N/A
FLK-FEV300/KIT ITDK	TEST ADAPTER EV CHARGING W/TYPE 2 PLUG & 1664FC ITDK	5363638	2800	N/A	N/A	N/A	20905	N/A	N/A
FLK-FEV300/KIT DE	TEST ADAPTER EV CHARGING W/TYPE 2 PLUG & 1664FC DE	5363645	2800	N/A	N/A	N/A	N/A	N/A	N/A
FLK-FEV300/KIT CH	TEST ADAPTER EV CHARGING W/TYPE	5363650	N/A	N/A	N/A	N/A	N/A	N/A	3157

	2 PLUG & 1664FC CH								
--	-----------------------	--	--	--	--	--	--	--	--

Availability

Open for Orders (OFO): the date the new products can be ordered from Fluke as of today	August 16, 2022
Public Embargo (PE): first date we communicate to the public, 4 weeks after the product announcement. Customer is not allowed to communicate before this date.	September 20, 2022
Available to Promise (ATP) at launch	60 days
Standard Lead Time (SLT): delivery	60 days

For actual delivery times please check -store

If you need further details on competitor comparison, please contact your Fluke representative.

Launch Assets & Marketing Communications

Assets	Languages	Where to find
Datasheet	<i>CS, DA, DE, EN, ES, FI, FR, IT, NL, NO, PO, PTPT, SV, TR</i>	syncforce.com
Photography	n/a	syncforce.com
Banners	<i>CS, DA, DE, EN, ES, FI, FR, IT, NL, NO, PO, PTPT, SV, TR</i>	syncforce.com
Training Deck	<i>CS, DA, DE, EN, ES, FI, FR, IT, NL, NO, PO, PTPT, SV, TR</i>	syncforce.com
Battlecard/ Sales Guide	<i>CS, DA, DE, EN, ES, FI, FR, IT, NL, NO, PO, PTPT, SV, TR</i>	syncforce.com

If you can't find what you need please contact your Fluke sales representative

Optional Accessories/Replacement Parts

Fluke Model	Description	P/N
FLK-FEV300/BASIC	TEST ADAPTER EV CHARGING, INTL	5348008
FLK-FEV300-CON-TY2	TYPE 2 PLUG FOR TEST ADAPTER EV CHARGING, INTL	5348123
FLK-FEV300-CON-TY1	TYPE 1 PLUG FOR TEST ADAPTER EV CHARGING, INTL	5348138

Related products

Fluke Model	Description	P/N
FLK-1664 FC SCH	FLUKE CONNECT INSTALLATION TESTER W/INSULATION PRE-TEST SCHUKO	4547054
FLK-1664 FC UK	FLUKE CONNECT INSTALLATION TESTER W/INSULATION PRE-TEST UK	4547031
FLK-1664 FC FR	FLUKE CONNECT INSTALLATION TESTER W/INSULATION PRE-TEST FR	4989829
FLK-1664 FC ITDK	FLUKE CONNECT INSTALLATION TESTER W/INSULATION PRE-TEST ITDK	4596184
FLK-1664 FC DE	FLUKE CONNECT INSTALLATION TESTER W/INSULATION PRE-TEST DE	4547068
FLK-1664 FC CH	FLUKE CONNECT INSTALLATION TESTER W/INSULATION PRE-TEST CH	5347987

Expectations at Launch

We expect our channels to get themselves ready for launch on the "Public Embargo Date."
Things you can work on already are:

- Prepare your systems & upload with all relevant data from our launch sheet
- Placing your first stocking orders – use the launch packs if appropriate
- Prepare your website pages to go live on PE date
- Plan your first launch communication activity to your customer base
- Plan your own customer facing webinar(s)
- Schedule additional communication activities (a monthly cadence is recommended) to help drive demand

For questions and if you want to receive product announcements from Fluke directly, please send an email to your Fluke sales contact.