

Jun. 14, 2011

TMC Develops Charger for EVs and PHVs

Toyota City, Japan, June 14, 2011—Toyota Motor Corporation (TMC) and TMC's customer-service IT company Toyota Media Service have co-developed a charger for electric vehicles (EVs) and plug-in hybrid vehicles (PHVs). Sales of the charger, called "G-Station", are planned to start in Japan through Toyota Media Service in July.

The 200 V G-Station features a contact-less smart-card recognition function, and can connect via the Internet with the Toyota Smart Center¹, which uses a global cloud platform recently announced as a co-development project with Microsoft Corporation.

Users can receive e-mails informing them that charging is complete and can also check, using a smartphone or a mobile phone, the location and availability of chargers. By identifying the user through smart card verification, charger administrators can access use history, bill the user or award points according to use time, and monitor use of the charger remotely. The administrator can also attach supplementary information to the G-station location information it sends.

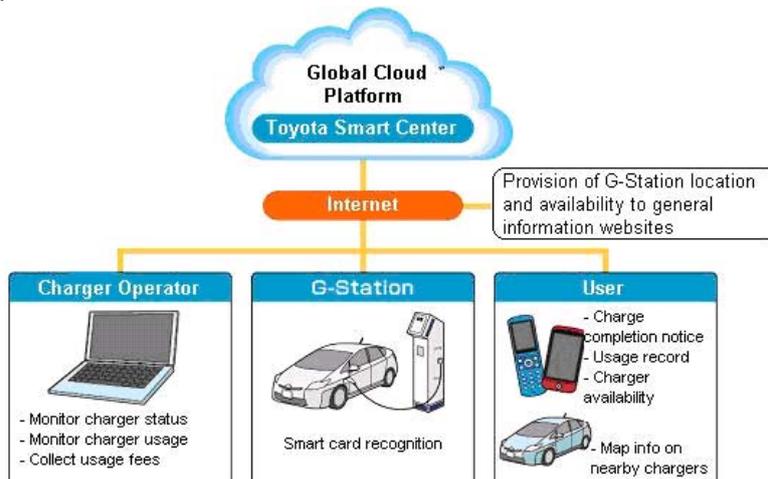
In addition, the location of chargers can be displayed and set as a destination on G-BOOK² compatible navigation systems and Smart G-BOOK, an information service for smartphones. Furthermore, information from the Toyota Smart Center regarding charger location and availability will be in an open format, allowing the information to be displayed on maps on the Internet and on navigation systems produced by other manufacturers.

G-Station, compatible with the proposed Japanese EV and PHV charging methods and usable with both Toyota and non-Toyota vehicles, will be available in Type A (standard) and Type B (advanced) versions. Type A, priced at 280,000 yen for the main unit (not including tax), will be the industry's most affordably priced³ charger with a telecommunications function.

In addition to selling G-Station to Toyota dealers nationwide, Toyota Media Service also plans to expand sales to such locations as shopping malls and family-style restaurants. Cumulative sales of around 3,000 G-Station units are expected by the end of 2012.

TMC will display the G-Station at the Toyota booth at the Smart Grid Exhibition 2011 to be held at Tokyo Big Sight from June 15 through 17.

G-Station System



G-Station Specifications

	Type A	Type B
Photo		
Model	TM-GSEV2A0081	TM-GSEV2B0081
Output voltage	Rated: Single-phase AC200 V 50 Hz/60 Hz	
Continuous rated current	15 A	
Charging connector & cable length	Approx. 7 M with connector	Approx. 7 M cord reel with connector
Weight	45 kg	55 kg
Width/depth/height)	220 mm/400 mm/1,400 mm	330 mm/480 mm/1,400 mm
Compatible vehicles	All PHV and EV models in Japan compatible with domestic charging methods currently proposed (G-Station charges using Mode 3, and is compatible with modes 1 and 2 ^{*1})	
Other	<ul style="list-style-type: none"> - Communications-network compatible^{*2} (LAN connection, WiMAX, CDMA) - FeliCa^{*3} authentication - Year round, 24-hour support 	<ul style="list-style-type: none"> - Communications-network compatible^{*2} (LAN connection, WiMAX, CDMA) - FeliCa^{*3} authentication - Motion sensor - Voice operations guidance - Visual display - Year round, 24-hour support
Manufacturer's suggested Retail Prices ^{*4}	280,000 yen	448,000 yen
<p>^{*1}Under conductive charging standards set by the International Electrotechnical Commission, standard charging for EVs and PHVs is split into three modes. Mode 1 (AC): Slow charging from a standard household-type socket-outlet; Mode 2 (AC): Slow charging from a standard household-type socket-outlet with an in-cable protection device; Mode 3 (AC): Slow or fast charging using a specific EV socket-outlet and plug with control and protection function permanently installed; ^{*2}Separate communications module required; ^{*3}A Sony Corporation's e-money system; ^{*4}Not including consumption taxes, installation fees and service fees.</p>		

¹A system that links homes, vehicles, electric power companies and users, and enables integrated control of energy consumption

²A TMC-developed telematics system and service

³As of June 14, 2011, according to TMC

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