

ABSTRACT

A charger management system includes an edge controller and a cloud server. The edge controller establishes a non-encrypted connection with a first type charger according a first security profile, and converts a first charging message, formatted according to a first communication protocol and transmitted from the first type charger, into a second charging message formatted according to a second communication protocol. The cloud server establishes a first encrypted connection with the edge charger if the edge controller passes a first mutual authentication test according to a second security profile higher than the first security profile, and performs a charging station management service on the first type charger in response to the second charging message transmitted through the first encrypted connection.

FIG. 1