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Type Examination Certificate

for Electrical Equipment used in Potentially Explosive Atmosphere

Issued by Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK	
Applicant	Pepperl+Fuchs K.K. 18-2 Hakusan 1-Chrome, Midori-ku, Yokohama 226-0006, Japan
Manufacturer name	Pepperl+Fuchs GmbH Lilienthalstrasse 200, 68307 Mannheim, Germany
Product name	Smart Phone
Type/model code	Smart-Ex 02 *** DZ1
Type of protection	Intrinsic Safety
Group, Temperature Class and EPL	IIC T4 Gb IIIC T120°C Db
The equipment shall be marked with the following	Ex ib op is IIC T4 Gb IP64 Ex ib op is IIIC T120°C Db
Ratings	Battery pack Ex-BP S02: 3.7 , 4400 mAh, 16.28 Wh Battery pack Ex-BP S02C: 3.7 , 3920 mAh, 14.50 Wh Charging and wired data transfer: Um = 6V (outside hazardous locations) Ambient temperature range: -20°C to +60°C
Special condition for safe use	See Appendix 1
Certificate number	CML 20JPN2061X
Term of validity	From 19-06-2020 to 18-06-2023 

This is to certify that the equipment specified above complies with the requirements stipulated in Ordinance on Examination of Machines and Other Equipment of the Ministry of Health, Labour and Welfare, Japan.

Issue date: 19-06-2020

Signature of chief examiner:





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CML 20JPN2061X

Issue: 0

Appendix 1: Special Conditions for Safe Use

- i. The battery pack shall only be charged and replaced in the non-hazardous area.
- ii. The power supply used for charging shall meet the requirements for SELV or PELV and $U_m = 6 \text{ V}$.
- iii. The battery cover for SIM/SD card and battery pack access shall be in place and screwed down tightly before the hazardous area is entered.
- iv. The device shall be protected from high energy impacts.
- v. The device shall not be used in close proximity to processes producing high electrostatic charges.
- vi. The device shall not be repaired or dismantled (except the battery cover in non-hazardous areas)
- vii. The 3.5 mm audio socket has the following Intrinsically Safe entity parameters, $U_o = 4.2 \text{ V}$, $I_o = 50 \text{ mA}$, $P_o = 100 \text{ mW}$, $C_o = 3 \text{ uF}$, $L_o = 440 \text{ uH}$.