

DARLENE PLATFORM HANDBOOK AND TUTORIAL CONTENT

This technical brochure includes information on the functionalities of the DARLENE system.



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DARLENE

DEEP AR LAW ENFORCEMENT ECOSYSTEM



ABOUT

The DARLENE Wearable Edge Computing Node (WECN) is a high-tech system designed to enhance your situational awareness. Prototype computer systems and artificial intelligence algorithms continuously analyse visual data and log items to aid the wearer in patrol investigations and tactical manoeuvring. The DARLENE head module software allows the WECN wearer to filter an abundance of information quickly and efficiently, in order to isolate notable occurrences and provide tactical analysis on a situation.

DARLENE WECN



DARLENE COMPONENTS



DARLENE WECN Helmet. AR viewer, cameras, Touchpad box and Android box with its battery are mounted on the helmet.



DARLENE AR viewer and WECN cameras.



Touchpad box where the touchpad, speaker, and microphone are located.



Android box containing the electronics and Helmet module's battery.



The belt bag containing the main computational node of the Belt Module and the LiPo battery.

DARLENE PCEN (Patrol Car Edge Node)

The PCEN contains a private 5G node, which gives service to LEAs and it is not accessible to mobile public users. This 5G node enables the 5G connectivity between the WECN and the PCEN, and it is implemented by an Amarisoft callbox mini.

PCEN information

Processor	Intel Core i7-1165G7
Storage Memory	500GB PCIe X4 Gen4 NVMe M.2 SSD
Maximum RAM	64 GB (2x8GB is pre-installed)
Thermal Design Power	40W
Max Turbo Frequency	4.7GHz
USB Configuration	2x front (Type-A, Type-C) and 3x rear USB 3.1 Gen2 (2x Type-A, Type-C); USB 2.0, USB 3.1 Gen2 via internal headers
Wireless Connectivity	Wi-Fi, Bluetooth
Size	117 x 112 x 56mm

COMMAND & CONTROL (C2) OPERATIONS

The C2 Operations category covers a range of functionalities related to the information that the DARLENE system can provide to C2 and to the information that C2 and field officers can share through the DARLENE system. The C2 Operations functionalities are divided into two broad categories, namely:

- Tactical Overview
- Real time video sharing