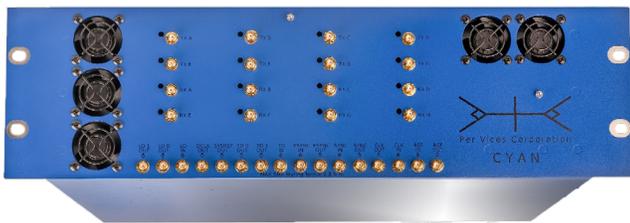


# PRODUCT SHEET

Per Vices Corporation  
High Performance Software Defined Radio Products

## What is SDR?



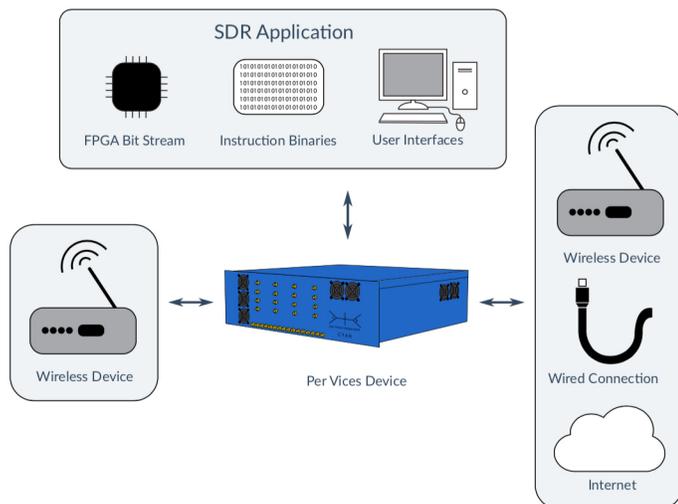
### OVERVIEW

Software defined radio (SDR) are flexible, high performance, radio and signal processing devices that are able to convert analog signals to digital and vice versa. They are more dynamic and advanced than conventional single-application hardwired radios due to the majority of the components being configured through software. The signal processing is conducted in field programmable gate arrays (FPGAs), which have the ability to be reprogrammed as needed, without having to undergo any hardware changes. This makes it easier to add new features and swap in new equipment onto existing infrastructure, and upgrade and adapt for future technological advancements.

### WHERE WE FIT IN OVERALL APPLICATION

Each radio has a set of boards for transmitting and receiving signals. This is where the conversion between analog and digital signals happen. For effective conversion, Cyan's RF Chain can sample 1GSPS with 16 bit resolution. Having a clearer digital signal allows you to offload complexity into either the FPGA or into the software realm entirely. The signals can be further passed to other equipment or re-broadcast over a different frequency and modulation type enabling interoperability.

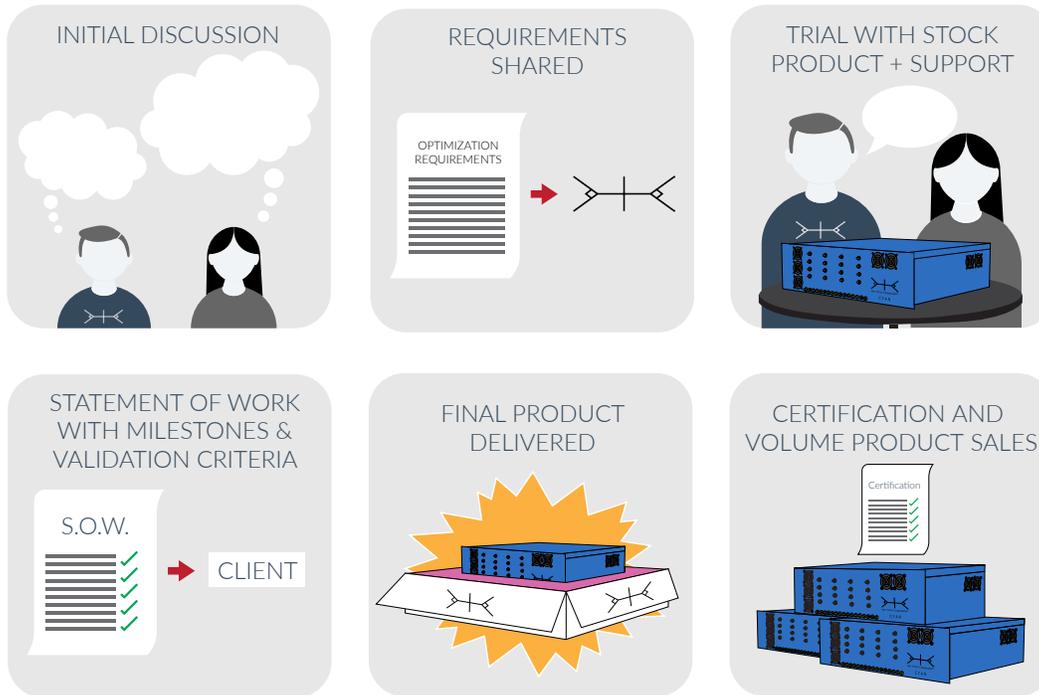
Our SDR can test multiple scenarios and protocols to determine stress points, thresholds, and help determine the optimal network configuration. Low latency, multiple interface options, and ease of programming allow you to quickly, cost-effectively, and accurately conduct multiple interoperability applications.



### KEY INTEGRATION VALUE

Both Cyan and Crimson TNG have been designed to be radio and digital resources all in one. Having a single dynamic platform aids in the design and execution of network systems and with maintenance and the ability to be upgraded in the long run. Our open architecture for communication across varied networks is imperative for testing interoperability and integrating with other systems. Our multi-channel SDRs send and receive signals on different frequencies and bridge the connection between those two frequencies.

## PER VICES COLLABORATIVE PROCESS



### WHAT WE NEED FROM YOU

To better understand your needs and to provide you with an effective solution we will need to know your desired frequency range for operation, interfacing equipment requirements, data rates, channel counts, (de)modulation types, and DSP requirements for onboard processing.

During these discussions we will also discuss timelines and goals for the project as they relate to the optimization between cost and performance. All this information helps us to make sure that we are providing you with the solution that best matches your needs while managing your own risks associated with new projects.

### END CUSTOMER BENEFITS

With Per Vices SDRs the interoperability of the network is based on software, and not reliant on vendor specific hardware. This allows easier communication between different systems, networks, hardware vendors, and service providers while maintaining high data rates and channel capacity.

### WORKING TOGETHER

Please contact us at [solutions@pervices.com](mailto:solutions@pervices.com) to learn more about how we can help you. Following our initial discussion, our team will support you throughout the whole process, from a trial with a stock product, to developing out specific requirements for a statement of work, all the way to the initial link set up deployment stages. Our sales engineers work with you each step of the way to ensure it's a smooth and easy integration of our product into your systems.

### CONFIDENTIALITY

Per Vices takes the protection of our customer information very seriously. In our initial discussion, we can have a more generalized conversation on what our platforms can do and discuss your specific requirements after entering into a mutual Non Disclosure Agreement.

## CONTACT US

More information is available at [www.pervices.com](http://www.pervices.com).  
If you have any questions, please contact us at [solutions@pervices.com](mailto:solutions@pervices.com).