Carrier convertor technology with high environmental resistance

We develop high efficiency E/O modulation module corresponding to millimeter-wave band so as to realize seamless carrier frequency conversion. Millimeter-wave band beam control technology corresponding to high mechanical vibration is developed so that high environmental resistance is realized. We develop a carrier converter unit using these technologies, and implement it on automobiles so as to demonstrate verification on automotive applications. To assume the capacity increase in future, we also conduct the research and development of high precision multiplexer/demultiplexer for high precision OAM mode multiplexing, wavelength conversion device for light source, optoelectronic mixer, and thus to contribute the convergence of wired an wireless network.

