In this paper a new type of radio access unit is proposed and demonstrated. This unit is composed only of the reduced amount of components (compared to conventional unit designs) to optically generate wireless signals on the W-band (75–110 GHz) in combination with a switching system. The proposed system not only achieves BER values below the FEC limit, but gives an extra level of flexibility to the network by easing the redirection of the signal to different antennas.