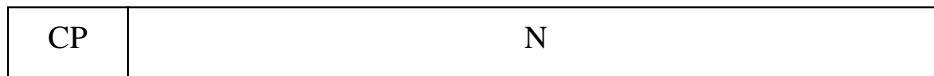


Project	<b>IEEE 802.16 Broadband Wireless Access Working Group</b> < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >
Title	<b>Preamble Specification for 802.16a OFDM PHY</b>
Date Submitted	<b>2001-09-13</b>
Source(s)	Preamble Ad Hoc Group: Hikmet Sari, Chair Ron Murias, Editor
Re:	
Abstract	This document outlines the format and contents of the preamble for the OFDM Mode of the 802.16 PHY.
Purpose	Completing current 802.16 OFDM PHY standard proposal
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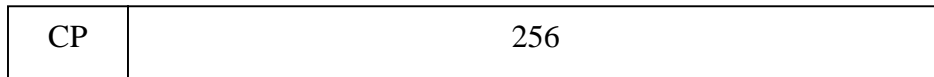
### OFDM Preamble Formats

For both the downlink and uplink in licensed frequency bands, the preamble consists of one OFDM symbol preceded by a cyclic prefix whose length is the same as the cyclic prefix in the traffic mode. This is illustrated in the following figure.



The N parameter here is the FFT size.

For both the downlink and uplink of the 256-carrier OFDM in license-exempt bands, the preamble consists of one OFDM symbol (256 samples) preceded by a cyclic prefix whose length is the same as the cyclic prefix in the traffic mode.



For both the downlink and uplink of the 64-carrier OFDM in license-exempt bands, the preamble consists of two OFDM symbols (128 samples) preceded by a cyclic prefix whose length is the same as the cyclic prefix in the traffic mode. See the following block diagram.

