

# ZigBee Protocol Frame Overview

KVP Frame

Bits: 4	4	16	0/8	variable
Command type Identifier	Attribute Data type	Attribute Identifier	Error code	Attribute Data

MSG Frame

Bits: 4	variable
Transaction length	Transaction Data

Bits: 8	variable
Transaction sequence number	Transaction Data
Transaction Header	Transaction Payload

Bits: 4	4	variable	variable	variable	variable
Transaction Count	Frame type	Transaction 1	Transaction 2	...	Transaction n

AF Frame  
(Spec 1.3.4)

APS Frame  
(Spec 1.2.5)

Octets: 1	0/1	0/1	0/2	0/1	variable
Frame Control	Destination Endpoint	Cluster Identifier	Profile Identifier	Source Endpoint	Data Payload ASDU
	Addressing Fields				
APS Header					APS Payload
APDU					

NWK Frame  
(Spec 2.4.1)

Octets: 2	2	2	1	1	variable
Frame Control	Destination Address	Source Address	Radius	Sequence Number	Data Payload NSDU
	Routing Fields				
NWK Header					NWK Payload
NPDU					

MAC Frame  
(IEEE 7.2.1)

Octets: 2	1	0/2	0/2/8	0/2	0/2/8	variable	2
Frame Control	Sequence Number	Destination PAN identifier	Destination address	Source PAN identifier	Source address	Data Payload MSDU	FCS
		Addressing Fields					
MAC Header						MAC Payload max 102 Byte	MFR
MPDU							

PHY Frame  
(IEEE 6.3.1)

Octets: 4	1	1		variable
Preamble	SFD	Frame length (7 bits)	Reserved (1 bit)	Data Payload PSDU
Synchronization Header		PHY Header		PHY payload max 127 Byte
PPDU				