

IP Conversion Tables

Subnet Masks using one octet for **Class A** networks.

# of subnets	Required # of bits	Subnet Mask	# of hosts per subnet
0	1	Invalid	Invalid
2	2	255.192.0.0	4,194,302
6	3	255.224.0.0	2,097,150
14	4	255.240.0.0	1,048,574
30	5	255.248.0.0	524,286
62	6	255.252.0.0	262,142
126	7	255.254.0.0	131,070
254	8	255.255.0.0	65,534

Subnet Masks using one octet for **Class B** networks.

# of subnets	Required # of bits	Subnet Mask	# of hosts per subnet
0	1	Invalid	Invalid
2	2	255.255.192.0	16,382
6	3	255.255.224.0	8,190
14	4	255.255.240.0	4,094
30	5	255.255.248.0	2,046
62	6	255.255.252.0	1,022
126	7	255.255.254.0	510
254	8	255.255.255.0	254

Subnet Masks using one octet for **Class C** networks.

# of subnets	Required # of bits	Subnet Mask	# of hosts per subnet
0	1	Invalid	Invalid
3-4	2	255.255.255.192	62
5-8	3	255.255.255.224	30
9-16	4	255.255.255.240	14
17-32	5	255.255.255.248	6
33-64	6	255.255.255.252	2
Invalid	7	Invalid	Invalid
Invalid	8	Invalid	Invalid
