**Network IP:**205.84.233.128

**Mask:**255.255.255.128 (/25)

**Sub networks:**

* N1: 22 IP's
* N2: 12 IP's
* N3: 10 IP's
* N4: 10 IP's
* N5: 2 IP's

|  |  |  |  |
| --- | --- | --- | --- |
| **Rețea** | **IP-uri necesare** | **Dim. clasă de adrese** | **Netmask** |
| N1  205.84.233.128/27 | 22 + 1 (rețea) + 1 (b-cast) + 1 (default gateway) = 25 | 32 = 2^5 | / (32-5) = 27 |
| N2  205.84.233.192/28 | 12 -> 15 | 16 = 2^4 | /28 |
| N3  205.84.233.208/28 | 10 -> 13 | 16 = 2^4 | /28 |
| N4  205.84.233.224/28 | 10 -> 13 | 16 = 2^4 | /28 |
| N5  205.84.233.224/29 | 2 -> 5 | 8 = 2^3 | /29 |

**Clasa:** 205.84.233.128/25

/25 = netmask = 11111111.11111111.11111111.10000000

* 2^(32-25) = 2^7 ip-uri din această clasă de adrese (2^nr. 0-uri din netmask)

**Adresa de rețea:** 205.84.233.128 AND 255.255.255.128 = 205.84.233.128

**Adresa de broadcast:** 205.84.233.128 OR not(255.255.255.128) =

= 205.84.233.128 OR 0.0.0.01111111 = 205.84.233.255

*Metoda 1:*

205.84.233.128/25 are 2^7 ip-uri => se împarte în 2 subclase de 2^6 ip-uri fiecare, astfel:

- 205.84.233.128/26 (205.84.233.128 – x.x.x.x), x.x.x.x = 205.84.233.191

\* 205.84.233.128/27

\* 205.84.233.160/27

- y.y.y.y/26 (y.y.y.y - 205.84.233.255), y.y.y.y = 205.84.233.191 + 1 = 205.84.233.192

\* 205.84.233.192/27

+ 205.84.233.192/28

+ 205.84.233.208/28

\* 205.84.233.224/27

+ 205.84.233.224/28

# 205.84.233.224/29

# 205.84.233.232/29

+ 205.84.233.240/28

205.84.233.128 OR not(11111111.11111111.11111111.11000000) =

= 205.84.233.128 OR 255.255.255.191 = 205.84.233.191

*Metoda 2:*