

Service Bulletin 083
January 23, 2018

Maximum Number of Devices on a tekmarNet® Bus

The tekmarNet® addressing system allows a maximum of 24 thermostats, setpoint controls or snow melting controls for each tN4 communication bus. However, some of these devices require more messages to operate and this reduces the total number that can be connected. For each thermostat, setpoint control or snow melting control add its communication budget. The total cannot exceed 24.

System Without Gateway 482, 483 or 485

Device Operation	Device Models	Communication Budget per Device
Heat only	161, 162 527, 528, 529, 537, 538 541, 542, 543 532, 552, 554	1.0
Heat, Cool, Fan	530, 540 544, 545, 546 553, 557	1.1
Snow Melt	654, 670	1.1

System With Gateway 482, 483 or 485

Device Operation	Device Models	Communication Budget per Device
Heat only	161, 162 527, 528, 529, 537, 538 541, 542, 543 532, 552, 554	1.0
Heat, Cool, Fan	530, 540 544, 545, 546 553	1.6
Heat, Cool, Fan, Humidity	557	1.7
Snow Melt	654, 670	1.7

Example: Can a tN4 bus have 10 of 557 and 4 of 552 when connected to a gateway?

557 communication budget: $10 \times 1.7 = 17$

552 communication budget: $4 \times 1.0 = 4$

Total communication budget: $17 + 4 = 21$

The answer is **YES**.