



Create a list of all mathematical function blocks in the OSCAT library for PLC programming.



The OSCAT (Open Source Community for Automation Technology) library is a collection of function blocks and libraries for PLC programming, designed to improve efficiency and make it easier for developers to implement their automation tasks. However, as an AI language model, I don't have a complete, up-to-date list of all mathematical function blocks in the OSCAT library.

You can visit the official OSCAT website (<http://www.oscat.de/>) to download the latest version of the library and review the documentation for a comprehensive list of available function blocks.

Here are some common mathematical function blocks that are likely to be present in the OSCAT library:

1. ADD - Addition
2. SUB - Subtraction
3. MUL - Multiplication
4. DIV - Division
5. MOD - Modulo
6. ABS - Absolute value
7. SQRT - Square root
8. POW - Power
9. EXP - Exponential
10. LN - Natural logarithm
11. LOG - Logarithm (base 10)
12. SIN - Sine
13. COS - Cosine
14. TAN - Tangent
15. ASIN - Arcsine
16. ACOS - Arccosine
17. ATAN - Arctangent
18. SINH - Hyperbolic sine
19. COSH - Hyperbolic cosine
20. TANH - Hyperbolic tangent
21. MIN - Minimum of input values
22. MAX - Maximum of input values
23. ROUND - Round to the nearest integer
24. FLOOR - Round down to the nearest integer
25. CEIL - Round up to the nearest integer
26. TRUNC - Truncate (remove the fractional part)
27. SCALE - Scale an input value from one range to another

Please note that this list is not exhaustive and may not fully represent the OSCAT library's current capabilities. Refer to the OSCAT library documentation for the most accurate and up-to-date information.