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C Data Types

The following table shows the data types allowed in LabWindows/CVI.

Type	Size	Minimum	Maximum
char	8	−128	127
unsigned char	8	0	255
short	16	−32,768	32,767
unsigned short	16	0	65,535
int; long int	32	−2 ³¹	2 ³¹ − 1
__int64; long long	64	−2 ⁶³	2 ⁶³ − 1
unsigned int	32	0	2 ³² − 1
unsigned __int64; unsigned long long	64	0	2 ⁶⁴ − 1
unsigned long	32	0	2 ³² − 1
float	32	−3.40282E+38	3.40282E+38
double; long double	64	−1.79769E+308	1.79769E+308
pointers (void *)	32 (32-bit OSes) 64 (64-bit OSes)	N/A	N/A
enum	32	−2 ³¹	2 ³¹ − 1
size_t	32 (32-bit OSes) 64 (64-bit OSes)	0 (32-bit OSes) 0 (64-bit OSes)	2 ³² − 1 (32-bit OSes) 2 ⁶⁴ − 1 (64-bit OSes)
ssize_t	32 (32-bit OSes) 64 (64-bit OSes)	−2 ³¹ (32-bit OSes) −2 ⁶³	2 ³¹ − 1 (32-bit OSes) 2 ⁶³ − 1
intptr_t	32 (32-bit OSes) 64 (64-bit OSes)	N/A	N/A
ptrdiff_t	32 (32-bit OSes) 64 (64-bit OSes)	N/A	N/A
uintptr_t	32 (32-bit OSes) 64 (64-bit OSes)	N/A	N/A

In LabWindows/CVI, characters are signed, unless you explicitly declare them unsigned. The types float and double conform to 4-byte and 8-byte IEEE standard formats.

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LabWindows/CVI 2017 Help

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