

uPHP Reference

uPHP functions have an identical syntax to PHP functions in most cases. Below is a list of all the functions that have been implemented.

Click on the function name for further details:

FUNCTION NAME	PARAMETER(S)	RETURN	DESCRIPTION
adc_read	int channel	int ADC value	Read an onboard ADC channel
array	mixed values ...	array	Create an array , with optional values
array_key	array , int index	string key	Return the key for an array index
array_keys	array with key/value pairs	array of keys	Return keys for an array that has key/value pairs
base64_decode	string base64	string decoded or int 0	Decode a base64-encoded string
base64_encode	string to encode	string base64 or int 0	Return the base64-encoded version of a string
call_user_func	string function_name , mixed parameters ...	mixed result	Call a user defined function with optional parameters
charat	string , int index	int ASCII code	Return the ASCII code for a character in a string at an index
chdir	string directory	int 0 =OK	Change the current directory
chr	int code	string 1 character	Return the character for an ASCII code
cos	number radian_angle	float cosine	Return cosine of a radian_angle
debug	string output		Print to debug output
debugout	int 0 or 1		Enable or disable debug messages
die			Kill the script
disk_free_space		int KiloBytes	Return free space on microSD card
disk_total_space		int KiloBytes	Return total space on microSD card
error_reporting	int verbosity		Set the debug output level
exec	string script , int delay		Run a script with an optional delay
exec_action	mixed action	int 1 =OK	Triggers a manually executable action by id or name
explode	string , string delimiter	array	Turn a string into an array
f485open	int baud , int parity	int handle or 0	Open the RS-485 port at the specified baud rate and parity
fclose	int handle		Close a file, stream or socket
feof	int handle	int 1 or 0	Test if no more data is available in a file, stream or socket
fgets	int handle , int size	string or int -1	Return a single line from a file, stream or socket, with optional size limit

FUNCTION NAME	PARAMETER(S)	RETURN	DESCRIPTION
file_exists	string filename	int 1 or 0	Check if a file exists
filesize	string filename or int handle	int bytes	Return the size of a file, or the number of unread bytes in a stream or socket
findfirst	string pattern , int attributes	array first file found	Start searching the current folder for files matching a pattern and attributes
findnext		array next file found	Return next matching file information (after a findfirst)
firmwareupdate			Initiate a firmware update sequence and reboot the device
floatval	mixed value	float value or int 0/1	Return the float value of a number or string
flush			Flush current output to the browser
fopen	string filename , string mode	int handle or 0	Open a file for reading or writing
fread	int handle , int bytes	string or int 0	Read bytes from a file, stream or socket
freemem		int bytes	Return free memory space
freestack		int bytes	Return free stack space
fseek	int handle , int offset , int whence		Position the file pointer in an open file
fseropen	int baud , int blocking , int invert , int parity	int handle or 0	Open the serial port at the specified baud rate with optional parameters
fsockopen	string host , int port , int timeout	int handle or 0	Open an internet socket connection with optional timeout
ftell	int handle	int position	Return the current position of a file read/write pointer
function_exists	string function_name	int 1 or 0	Check if a function exists (custom or native)
fwrite	int handle , mixed data	int bytes written or -1	Write data to a file, stream or socket
get3gstat		array	Get cellular data connection status information
getcwd		string path	Get the current directory
getethstat		array	Get Ethernet connection status information
getmac		string MAC	Get the Wattmon's MAC address
getusbstat		array	Get USB host status information
header	string header_data		Add to HTTP header
htmlspecialchars	string data	string converted	Convert special characters for display in HTML
ieee754toint	float value	int representation	Convert a float value to an IEEE-754 encoded integer (32 bit)
implode	array , string delimiter	string	Turn an array into a string

FUNCTION NAME	PARAMETER(S)	RETURN	DESCRIPTION
<code>include</code>	<code>string filename</code>		Include a file within the current script at the current location
<code>indexed_array</code>	<code>int type</code> , <code>int size</code>	<code>array</code>	Create an <code>array</code> of a specific <code>type</code> and <code>size</code>
<code>ini_get</code>	<code>string filename</code> , <code>string section</code> , <code>string key</code> , <code>mixed default</code>	<code>mixed</code> value	Get a value from an INI file
<code>ini_get_array</code>	<code>string filename</code> , <code>string section</code>	<code>array</code>	Get a group of parameters from an INI file as an <code>array</code>
<code>ini_put_array</code>	<code>string filename</code> , <code>array data</code> , <code>string section</code>		Write a group of parameters to an INI file from an <code>array</code>
<code>ini_set</code>	<code>string filename</code> , <code>string section</code> , <code>string key</code> , <code>mixed value</code>	<code>int</code> 1=OK	Set a <code>value</code> in an INI file
<code>inttoieee754</code>	<code>int</code> representation	<code>float</code> value	Convert an IEEE-754 encoded <code>integer</code> representation (32 bit) to a <code>float</code>
<code>intval</code>	<code>mixed</code> value	<code>int</code> value	Return the <code>integer</code> value of a <code>number</code> or <code>string</code>
<code>is_array</code>	<code>mixed</code> variable	<code>int</code> 1 or 0	Check if a <code>variable</code> is an <code>array</code>
<code>is_float</code>	<code>mixed</code> variable	<code>int</code> 1 or 0	Check if a <code>variable</code> is a <code>float</code>
<code>is_int</code>	<code>mixed</code> variable	<code>int</code> 1 or 0	Check if a <code>variable</code> is an <code>integer</code>
<code>is_numeric</code>	<code>mixed</code> value	<code>int</code> 1 or 0	Check if a <code>value</code> is numeric (<code>int</code> , <code>float</code> or numeric <code>string</code>)
<code>is_string</code>	<code>mixed</code> variable	<code>int</code> 1 or 0	Check if a <code>variable</code> is a <code>string</code>
<code>isset</code>	<code>mixed</code> variable	<code>int</code> 1 or 0	Check if a <code>variable</code> exists
<code>json_encode</code>	<code>array</code> , <code>int</code> method	<code>string</code>	JSON encode an <code>array</code> into a <code>string</code> , with optional <code>method</code>
<code>ln</code>	<code>number</code> number	<code>float</code> log _e	Return the natural logarithm of a <code>number</code>
<code>log</code>	<code>string</code> output, <code>string</code> file		Print to the System Log (or optional <code>file</code>)
<code>log10</code>	<code>number</code> number	<code>float</code> log ₁₀	Return the base 10 logarithm of a <code>number</code>
<code>mail</code>	<code>string</code> recipient, <code>string</code> subject, <code>string</code> body	<code>int</code> 0 or SMTP error code	Send an email
<code>max_execution_time</code>	<code>int</code> seconds		Set the maximum execution time for the current script
<code>mb_add_dev</code>	<code>int</code> id, <code>int</code> type, <code>string</code> name, <code>int</code> poll_interval, <code>int</code> status	<code>int</code> 0=OK	Add a device to the list of polled devices
<code>mb_delete_device</code>	<code>int</code> id	<code>int</code> 1=OK	Delete a device from the list of active devices
<code>mb_get_dev_by_id</code>	<code>int</code> id	<code>array</code>	Return modbus device details by <code>id</code>
<code>mb_get_dev_by_index</code>	<code>int</code> index	<code>array</code>	Return modbus device details by <code>index</code>
<code>mb_get_dev_by_name</code>	<code>string</code> name	<code>array</code>	Return modbus device details by <code>name</code>

FUNCTION NAME	PARAMETER(S)	RETURN	DESCRIPTION
mb_get_dev_info	int type	array	Return modbus device details by type
mb_get_role_array		array	Return an array of all roles and their values
mb_get_status_by_role	int role	int 1=OK	Return status of the device attached to the role
mb_get_val_by_role	int role	number	Return value of the role
mb_num_devices		int	Return number of devices on the modbus
mb_queue_command	mixed values ...	array of numbers	Queue a sequence of characters to the rs485 bus and get but ignore the reply
mb_scan_complete		int 1=complete, 0=ongoing	Check to see if a modbus scan has completed
mb_scan_percent		number percent completed	Return scan percentage completed
mb_send_command	mixed values ...	array of numbers	Send a sequence of characters to the rs485 bus and get a reply
mb_set_dev_var	string name or int id, string variable, mixed value	int 1=OK	Set a variable on a modbus device
mb_set_val_by_role	int role, number value	int 1=OK	Set a role value on a modbus device
mb_start_scan	int start, int end		Initiate an automatic scan of the modbus
md5	string input	string 32 characters	Calculate the MD5 hash of a string
md5_file	string filename	string 32 characters	Calculate the MD5 hash of a file
mem_dump			Write the current memory map to /dump.txt
mem_usage			Write memory usage to standard output
microtime		int ms	Return the number of milliseconds since boot
mkdir	string pathname	int 0 or error code	Make a directory
mktime	int hour, int minute, int second, int month, int day, int year	int seconds	Return the Linux Timestamp for a given date and time
net_disable3g			Disable 3G support for the dongle
net_enable3g			Enable 3G support for the dongle
netstat		array	Get Ethernet information
number_format	mixed number, int digits	string formatted	Return the string value of a number formatted to a particular precision
nvram_backup	string filename	int bytes written or 0=error	Backup the contents of NVRAM to a file on the SD Card
nvram_defrag			Defragment NVRAM to optimise it

FUNCTION NAME	PARAMETER(S)	RETURN	DESCRIPTION
<code>nvramp_dump</code>			Dump the contents of <code>NVRAM</code> to standard output
<code>nvramp_free</code>		<code>int</code> bytes	Return the number of bytes available in <code>NVRAM</code>
<code>nvramp_get</code>	<code>string</code> key	<code>mixed</code> value	Get a value from <code>NVRAM</code>
<code>nvramp_restore</code>	<code>string</code> filename		Restore the contents of <code>NVRAM</code> from a file
<code>nvramp_set</code>	<code>string</code> key, <code>string</code> value	<code>int</code> 1=OK	Set a <code>key</code> and <code>value</code> in <code>NVRAM</code>
<code>nvramp_unset</code>	<code>string</code> key	<code>int</code> 1=OK	Clear a <code>key</code> from <code>NVRAM</code>
<code>ord</code>	<code>string</code> character	<code>int</code> ASCII code	Return the ASCII code for a <code>character</code>
<code>ow_first</code>		<code>array</code> or <code>int</code> 0	Initiate a OneWire bus scan and return the address of the first device found
<code>ow_next</code>		<code>array</code> or <code>int</code> 0	Return the address of the next OneWire device found (after an <code>ow_first</code>)
<code>ow_read</code>		<code>int</code> value or 0	Read a byte from the OneWire bus
<code>ow_read_temp</code>	<code>array</code> device_id	<code>float</code> degrees Celsius	Read a temperature from a device on the OneWire bus
<code>ow_reset</code>			Reset the OneWire bus
<code>ow_write</code>	<code>int</code> value		Write a byte to the OneWire bus
<code>phpinfo</code>		<code>string</code>	Return information about the system
<code>pin_configure</code>	<code>int</code> pin_index, <code>int</code> pin_type, <code>int</code> counter_type		Configure an IO pin as a digital input, output, or analog input
<code>pin_get</code>	<code>int</code> pin_index, <code>int</code> pin_type	<code>int</code> value	Return the value of an IO pin
<code>pin_set</code>	<code>int</code> pin_index, <code>int</code> value		Set a digital output to <code>value</code> 1 or 0
<code>ping</code>	<code>string</code> host	<code>array</code>	Send an ICMP ping and place the result in an <code>array</code>
<code>power</code>	<code>number</code> base, <code>number</code> exp	<code>number</code> base ^{exp}	Return <code>base</code> raised to the power of <code>exp</code>
<code>print</code>	<code>string</code> data		Print <code>data</code> to the current output stream such as a web page or terminal
<code>print_r</code>	<code>array</code>		Dump the contents of an <code>array</code> to the current output
<code>printf</code>	<code>string</code> format, <code>mixed</code> values ...		Print a formatted <code>string</code> to standard output
<code>process_kill</code>	<code>int</code> pid		Send a kill request to a process
<code>process_list</code>		<code>array</code>	Return an <code>array</code> of the currently running scripts
<code>rand</code>	<code>int</code> min, <code>int</code> max	<code>int</code>	Return a random <code>integer</code> between <code>min</code> and <code>max</code>
<code>reboot</code>			Reboot the processor

FUNCTION NAME	PARAMETER(S)	RETURN	DESCRIPTION
rename	string source, string destination	int 0 or error code	Rename or move a file or directory from source to destination
reset			Reset the processor
rmdir	string pathname, int delete_contents	int 0=OK	Remove a directory, with optional deletion of contents
session_destroy			Clear the current session's data
session_is_new		int	Check if a session was just initiated
session_start			Initiate a new session and send the cookie data for it
set_search_path	string pathname		Set the search path for the telnet client
setethpower	int state		Enable or disable the ethernet controller
setpriority	int priority		Set the priority of the current script
settime	int timestamp, int calibration		Set the system time from a Linux Timestamp , with optional calibration
setusbpower	int state		Enable or disable USB power
sha1	string input	string 40 characters	Calculate the SHA1 hash of a string
sin	number radian_angle	float sine	Return sine of a radian_angle
sizeof	array	int number of elements	Return the number of elements in an array
sleep	int ms		Sleep for specified milliseconds
spi_clearcs			Clear the CS output of the SPI bus
spi_read		int byte	Read a byte from the SPI bus
spi_setcs			Set the CS output of the SPI bus
spi_write	int byte		Write a byte to the SPI bus
sprintf	string format, mixed values ...	string formatted	Return a formatted string
sqr	number number	number squared	Return the square of a number
sqrt	number number	number square root	Return the square root of a number
stats		array	Return system statistics
strftime	string format, int timestamp	string formatted	Format a Linux Timestamp using a format string
strlen	string input	int length	Return the length of a string
strpos	string haystack, string needle	int position or -1	Return the position of the first occurrence of a needle in a haystack
strrpos	string haystack, string needle	int position or -1	Return the position of the last occurrence of a needle in a haystack

FUNCTION NAME	PARAMETER(S)	RETURN	DESCRIPTION
strtolower	string input	string lowercase	Return the lowercase version of a string
strtoupper	string input	string UPPERCASE	Return the UPPERCASE version of a string
strval	mixed value	string	Return the string equivalent of a number
substr	string input , int start , int len	string substring	Return part of a string
tar_finish	number handle		Add the ending header to a TAR file
tar_put	number handle, string filename	number (1=OK)	Add a file to an open file in TAR format
time		int seconds	Return the current system timestamp
timefromfat	int filetime	int seconds	Convert a FAT filetime to a Linux Timestamp
ucfirst	string input	string Proper Case	Convert a string to lowercase except for the first character of each word
unlink	string filename	Number (0=OK)	Remove a file (delete it)
untar	string filename, number verbose		Expand a file into the current folder, optionally verbose
uptime		int ms	Return the uptime in milliseconds
usbinfo		array	Get information about the USB state

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