

- Notes:
- 16-bit registers are transmitted MSB first (i.e. big-endian).
 - INT32 and UINT32 are most-significant word in n+0, least significant word in n+1 (i.e. big-endian).
 - Function codes 3 and 4 are supported
 - Modbus TCP must use Device ID=2 to communicate with the NMC.
 - Signed numbers are twos-compliment
 - Status bits are atomic within a single Modbus register. User should not look for consistency across multiple registers, only within a single register.
 - For ASCII strings less than the maximum length, the unused characters are filled with nulls.
 - Single-register reads of reserved or undefined registers will return an error. Block reads which begin with a valid register will not return an error but will return zeros for undefined registers.
 - Strings are two characters per register, first character in high-order byte, second character in low-order byte. Printable ASCII only.
 - Bit #0 is least significant bit.
 - Data Type column: "INT16"=signed 16-bit integer, "UINT16" = unsigned 16-bit integer, "INT32" = signed 32-bit integer, "UINT32" = unsigned 32-bit integer, "ENUM" is a UINT16 value which maps to a defined list of states, "ASCII" = the printable ASCII subset from 0x20 - 0x7E. BOOLEAN= a single bit, 0 or 1.
 - "Absolute Starting Register Address" = 0 (the column heading used in this table) is equivalent to "Register 40001" in Modicon terminology, which is address zero when transmitted over the

										Scale										Implemented				
Modicon Standard Register Number	Modbus Function Code	Absolute Starting Register Address (Hexa-decimal)	Absolute Starting Register Address, (Decimal)	Bit	Data Point	Card to Customer	Length # registers	Data Type	R/W	E3S Units	E3S Multiply by:	E3M/L Units	E3M/L Multiply by:	3S Pro Units	3S Pro Multiply by:	GPW2 units	GPW2 Scale	Response	E3S	E3M	E3L	3S II	GPW2	
40001	0x04	0x0000	0		UPS Status Summary		1	BOOLEAN	RO										.	.	.	.	.	
				0	Load is being powered from battery for any reason. Includes both bits 3 & 12 and any other reason.	X		BOOLEAN	RO									1=Load is being powered from battery	Y	Y	Y	Y	Y	
				1	Low-Battery	X		BOOLEAN	RO									1=Low Battery	Y	Y	Y	Y	Y	
				2		X		BOOLEAN	RO									1=System is in Bypass	Y	Y	Y	Y	Y	
				3	UPS running on battery due to Self-Test (not due to input failure).	X		BOOLEAN	RO									1=Battery-test in progress	Y	Y	Y	Y	Y	
				4	Load not Powered	X		BOOLEAN	RO									1=Load is not powered	Y	Y	Y	Y	Y	
				5	Rectifier Status	X		BOOLEAN	RO									1=Rectifier failure	Y	Y	Y	Y	Y	
				6	Inverter Failure	X		BOOLEAN	RO									1=Inverter failure	Y	Y	Y	Y	Y	
				7	Abnormal Condition (Soft errors: not hardware failures, e.g. overload, over-temp, lo/hi input voltage, etc.)	X		BOOLEAN	RO									1=Abnormal condition present OR of: 2.4, 2.9, 2.14, 2.15, 2.0, 3.15, 4.8, 4.11, 7.12, 13.8, 16.5	Y	Y	Y	Y	Y	
				12	Input failure (includes high/low voltage, phase reverse, frequency outside of 40-70 Hz and Neutral missing, as well as input line failure) Does not include on-battery due to battery self-test.	X		BOOLEAN	RO									1=Input failure	Y	Y	Y	Y	Y	
				13	Battery condition is poor	X		BOOLEAN	RO									1=Battery condition is weak	Y	Y	Y	Y	Y	
				14	Warning alarm present	X		BOOLEAN	RO									1=Warning alarm present	Y	Y	Y	Y	Y	
				15	Critical alarm present	X		BOOLEAN	RO									1=Critical alarm present	Y	Y	Y	Y	Y	
																		.	.	.				
40003	0x04	0x0002	2		Alarm Register 1		1												.	.	.			
				0	Lost local network management interface - to - UPS communication	X		BOOLEAN	RO									1=Lost local network management interface - to - UPS communication	Y	Y	Y	Y	Y	
				4	Inverter overload	X		BOOLEAN	RO									1=Inverter overload	Y	Y	Y	Y	Y	
				9	Inverter overload shutdown	X		BOOLEAN	RO									1=Inverter shutdown due to overload	Y	Y	Y	Y	Y	
				14	Inverter over-temperature	X		BOOLEAN	RO									1=Inverter over-temperature	Y	Y	Y	Y	Y	
				15	Overload on system	X		BOOLEAN	RO									1=Overload on system	Y	Y	Y	Y	Y	
																		.	.	.				

										Scale										Implemented				
Modicon Standard Register Number	Modbus Function Code	Absolute Starting Register Address (Hexa-decimal)	Absolute Starting Register Address, (Decimal)	Bit	Data Point	Card to Customer	Length # registers	Data Type	R/W	E3S Units	E3S Multiply by:	E3M/L Units	E3M/L Multiply by:	3S Pro Units	3S Pro Multiply by:	GPW2 units	GPW2 Scale	Response	E3S	E3M	E3L	3S II	GPW2	
40004	0x04	0x0003	3		Alarm Register 2		1												.	.	.			
				0	On battery in response to an input power failure -- No AC	X		BOOLEAN	RO									1=On battery in response to an input power failure	Y	Y	Y	Y	Y	
				3	In Bypass: For maintenance	X		BOOLEAN	RO									1=In Bypass: For maintenance	Y	N	N	Y	N	
				12	Input frequency fault	X		BOOLEAN	RO									1=Input frequency fault	Y	N	N	N	N	
				13	Input voltage error	X		BOOLEAN	RO									1=Input voltage is out of range	Y	N	N	N	N	
				14	Rectifier fault	X		BOOLEAN	RO									1=Rectifier fault	Y	Y	Y	Y	Y	
				15	Rectifier over temperature	X		BOOLEAN	RO									1=Rectifier over temperature	Y	Y	Y	Y	Y	
																		.	.	.				
40005	0x04	0x0004	4		Alarm Register 3		1												.	.	.			
				0	Bypass voltage error: low voltage	X		BOOLEAN	RO									1=Bypass voltage error: low voltage	Y	N	N	N	N	
				1	Bypass voltage error: high voltage	X		BOOLEAN	RO									1=Bypass voltage error: high voltage	Y	N	N	N	N	
				3	Bypass input frequency fault	X		BOOLEAN	RO									1=Bypass input frequency fault	Y	N	N	N	N	
				5	Output voltage low	X		BOOLEAN	RO									1=Output voltage low	Y	N	N	N	N	
				6	Output voltage high	X		BOOLEAN	RO									1=Output voltage high	Y	N	N	N	N	
				8	Overload	X		BOOLEAN	RO									1=Overload	Y	Y	Y	Y	Y	
				9	Overload on bypass static switch	X		BOOLEAN	RO									1=Overload on bypass static switch	Y	N	N	N	N	
				10	Ambient temperature out of range	X		BOOLEAN	RO									1=Ambient temperature out of range	Y	N	N	N	N	
				11	EPO activated	X		BOOLEAN	RO									1=EPO activated	Y	Y	Y	Y	Y	
				13	Aux Power Supply fault	X		BOOLEAN	RO									1=Aux Power Supply fault	Y	Y	Y	Y	N	
				14	Bypass input voltage error	X		BOOLEAN	RO									1=Bypass input voltage is out of range	Y	N	N	N	N	
				15	Inverter Fault	X		BOOLEAN	RO									1=Inverter fault	Y	Y	Y	Y	Y	
																		.	.	.				
40006	0x04	0x0005	5		Alarm Register 4		1												.	.	.			
				1	Batteries are discharging	X		BOOLEAN	RO									1=Batteries are discharging	Y	N	N	N	N	
				12	Battery condition is poor	X		BOOLEAN	RO									1=Battery condition is <75%	Y	N	N	N	N	
				13	Battery condition is weak	X		BOOLEAN	RO									1=Battery condition is <50%	Y	N	N	N	N	
																		.	.	.				
40007	0x04	0x0006	6		Alarm Register 5		1												.	.	.			
				1	Battery voltage error - voltage above shutdown level	X		BOOLEAN	RO									1=Battery voltage error - voltage above shutdown level	Y	N	N	N	N	
				4	Battery is below minimum acceptable runtime	X		BOOLEAN	RO									1=Battery is below minimum acceptable runtime	Y	N	N	Y	Y	
																		.	.	.				
40008	0x04	0x0007	7		Alarm Register 6		1												.	.	.			
				6	Output voltage error	X		BOOLEAN	RO									1=Output voltage is outside its defined limits	Y	N	N	N	N	
				9	Load on UPS is above warning level	X		BOOLEAN	RO									1=Load on UPS is above warning level	Y	N	N	N	N	
																		.	.	.				
40009		0x0008	8		Alarm Register 7		1												.	.	.			
				4	Battery voltage error - voltage below shutdown level	X		BOOLEAN	RO									1=Battery voltage error - voltage below shutdown level	Y	N	N	N	N	
																		.	.	.				
40010		0x0009	9		Alarm Register 8		1												.	.	.			
				10	Breaker Q2 (UOB) open	X		BOOLEAN	RO									1=Breaker Q2 (UOB) open	N	Y	Y	N	Y	
																		.	.	.				
40011		0x000A	10		Alarm Register 9		1												.	.	.			
				11	Bypass over-temperature	X		BOOLEAN	RO									1=Bypass over-temperature	N	Y	Y	N	Y	
																		.	.	.				

									Scale										Implemented				
Modicon Standard Register Number	Modbus Function Code	Absolute Starting Register Address (Hexa-decimal)	Absolute Starting Register Address, (Decimal)	Bit	Data Point	Card to Customer	Length # registers	Data Type	R/W	E3S Units	E3S Multiply by:	E3M/L Units	E3M/L Multiply by:	3S Pro Units	3S Pro Multiply by:	GPW2 units	GPW2 Scale	Response	E3S	E3M	E3L	3S II	GPW2
40014	0x04	0x000D	13		Alarm Register 12		1																
				0	Battery breaker open	X		BOOLEAN	RO									1=Battery breaker open	Y	N	N	N	N
				3	Internal battery temperature exceeds threshold	X		BOOLEAN	RO									1=Internal battery temperature exceeds threshold	Y	N	N	N	N
				8	Battery string disconnected	X		BOOLEAN	RO									1=Battery string disconnected	Y	Y	Y	Y	Y
40017	0x04	0x0010	16		Alarm Register 15		1																
				0	UPS operation mode - Static bypass standby	X		BOOLEAN	RO									1=UPS operation mode - Static bypass standby	Y	N	N	N	N
				1	UPS operation mode - Inverter standby	X		BOOLEAN	RO									1=UPS operation mode - Inverter standby	Y	N	N	N	N
				2	UPS operation mode - Power saving mode	X		BOOLEAN	RO									1=UPS operation mode - Power saving mode	Y	Y	Y	Y	Y
				5	Short circuit on output	X		BOOLEAN	RO									1=Short circuit on output	Y	Y	Y	Y	Y
				7	Fan fault	X		BOOLEAN	RO									1=Two or more faulty fans exists	Y	Y	Y	Y	Y
				11	Charger status	X		BOOLEAN	RO									1=Faulty	Y	Y	Y	Y	Y
				12	Inverter status	X		BOOLEAN	RO									1=Faulty	Y	Y	Y	Y	Y
				0	Technical check recommended	X		BOOLEAN	RO									1=Technical check recommended	Y	N	N	N	N
				2	Warranty expiring soon	X		BOOLEAN	RO									1=Warranty expiring soon	Y	N	N	N	N
				3	Batteries check recommended	X		BOOLEAN	RO									1=Batteries check recommended	Y	N	N	N	N
				4	Air filter check recommened	X		BOOLEAN	RO									1=Air filter check recommened	Y	N	N	N	N
				5	Fans check recommended	X		BOOLEAN	RO									1=Fans check recommended	Y	N	N	N	N
																			.	.	.		
		Static Data																	.	.	.		
44097	0x03	0x1000	4096		NMC Model Number	X	9	ASCII	RO										Y	Y	Y	Y	Y
44106	0x03	0x1009	4105		NMC Serial Number	X	8	ASCII	RO										Y	Y	Y	Y	Y
44114	0x03	0x1011	4113		NMC Firmware Revision APP	X	9	ASCII	RO										Y	Y	Y	Y	Y
44123	0x03	0x101A	4122		NMC Hardware Revision	X	9	ASCII	RO										Y	Y	Y	Y	Y
44132	0x03	0x1023	4131		NMC Date of Manufacture	X	6	ASCII	RO										Y	Y	Y	Y	Y
44138	0x03	0x1029	4137		UPS Model Name	X	8	ASCII	RO										Y	Y	Y	Y	Y
44146	0x03	0x1031	4145		UPS Serial Number	X	8	ASCII	RO										Y	Y	Y	Y	Y
44154	0x03	0x1039	4153		UPS Firmware Version	X	12	ASCII	RO										Y	Y	Y	Y	Y
					UPS Family: 3S = 1 3S PRO = 2 3M = 5 3L = 9 GPW2 = 13	X	1	UINT16	RO									UPS Family: 3S = 1 3S PRO = 2 3M = 5 3L = 9 GPW2 = 13	Y	Y	Y	Y	Y
44179	0x03	0x1052	4178		Number of output phases	X	1	UINT16	RO									0 or 1 (1: Single Phse 0: Three Phase)	N	N	N	Y	Y
44180	0x04	0x1053	4179		UPS Firmware Version Register 2 (MCU)	X	6	ASCII	RO										N	N	N	N	Y
44186	0x05	0x1059	4185		UPS Firmware Version Register 3 (Display)	X	6	ASCII	RO										N	N	N	N	Y
44192	0x03/0x06	0x105F	4191		NMC MAC Address	X	3	UINT16	RO										N	N	N	Y	N
44199	0x03	0x1066	4198		UPS Date of Manufacture	X	5	ASCII	RO									UPS does not implement, this comes only from NMC	Y	Y	Y	Y	Y
																			.	.	.	.	.

										Scale									Implemented				
Modicon Standard Register Number	Modbus Function Code	Absolute Starting Register Address (Hexa-decimal)	Absolute Starting Register Address, (Decimal)	Bit	Data Point	Card to Customer	Length # registers	Data Type	R/W	E3S Units	E3S Multiply by:	E3M/L Units	E3M/L Multiply by:	3S Pro Units	3S Pro Multiply by:	GPW2 units	GPW2 Scale	Response	E3S	E3M	E3L	3S II	GPW2
		Maintenance Data																					
48961	0x03	0x2300	8960		DC capacitor maintenance cycle	X	1	UINT16	RO	Days	1	Months	1	Days	1	Months	1		Y	Y	Y	N	Y
48962	0x03	0x2301	8961		AC capacitor maintenance cycle	X	1	UINT16	RO	Days	0.1	Months	1	Days	0.1	Months	1		Y	Y	Y	N	Y
48963	0x03	0x2302	8962		Aux Power Supply (APS) maintenance cycle	X	1	UINT16	RO	Days	0.1	Months	1	Days	0.1	Months	1		Y	Y	Y	N	Y
48964	0x03	0x2303	8963		Air filter maintenance cycle	X	1	UINT16	RO	Days	1	Months	1	Days	1	Months	1		Y	Y	Y	Y	Y
48965	0x03	0x2304	8964		Battery maintenance cycle	X	1	SINT16	RO	Days	1	Months	1	Days	1	Months	1	remaining vs. 1440 days/ 48 mo. / 4 years	Y	Y	Y	N	Y
48966	0x03	0x2305	8965		Warranty cycle	X	1	UINT16	RO	Days	0.1	Months	1	Days	0.1	Months	1		Y	Y	Y	Y	Y
48977	0x03	0x2310	8976		DC capacitor running time	X	1	UINT16	RO	Days	1	Days	1	Days	1	Days	1		Y	Y	Y	N	Y
48978	0x03	0x2311	8977		AC capacitor running time	X	1	UINT16	RO	Days	0.1	Days	1	Days	0.1	Days	1		Y	Y	Y	N	Y
48979	0x03	0x2312	8978		Aux Power Supply (APS) running time	X	1	UINT16	RO			Days	1	Days	0.1	Days	1		N	Y	Y	N	Y
48980	0x03	0x2313	8979		Air filter running time	X	1	UINT16	RO			Days	1	Days	0.1	Days	1		N	Y	Y	Y	Y
48981	0x03	0x2314	8980		Battery running time	X	1	UINT16	RO	Days	0.1	Days	1	Days	0.1	Days	1		Y	Y	Y	N	Y
48982	0x03	0x2315	8981		Warranty elapsed time	X	1	UINT16	RO			Days	1	Days	0.1	Days	1		N	Y	Y	Y	Y
46412	0x03	0x190B	6411		Last Battery Transfer	X	1	ENUM	RO									0="None" / 1="Input Failure" / 2="UPS Battery Test".	Y	N	N	Y	N
46413	0x03	0x190C	6412		Last Battery Test Result	X	1	ENUM	RO									0="Pass" (Event Message: UPS:Passed a self test) 1="Fail"(Alarm messege: Self-Test-Did not pass.	Y	N	N	Y	N
46417	0x03	0x1910	6416		UPS State Type	X	1	UINT16	RO						1			Easyusp 3S/3M/3L: - 1 = Single, 2 = Parallel System Redundancy UPS (1+1), 3 = 3:3 Parallel GPW2: - 0 = Single, 1 = Single mode, Eco, 2=Parallel mode.	Y	Y	Y	Y	Y

Worldwide Customer Support

Access to customer support terms may vary by product. Customer support is available in the following ways:

- *Visit the Schneider Electric Web site to access documents in the Schneider Electric Knowledge Base and to submit customer support requests.
–www.schneider-electric.com (Corporate Headquarters) Connect to localized Schneider Electric Web sites for specific countries, each of which provides customer support information.
– www.schneider-electric.com/support/Global support searching Schneider Electric Knowledge Base and using e-support.
 - *Contact the Schneider Electric Customer Support Center by telephone or e-mail.
–Local, country-specific centers: go to www.schneider-electric.com > Support > Operations for around the world for contact information.
- For information on how to obtain local customer support, contact the representative or other distributors from whom you purchased your product.