

Nv-14s Register Map Ver 1.00

1 reg = 2bytes (16bit)
short int = 16 bit
int = 32 bit
long int = 64 bit
neg P = export
neg Q = capacitive

Instantaneous Parameter								
Reg Addr (Hex)	Register	(R/W)	Unit	Multiplier	Format	Comment	Reg Byte Count	Reg Addr (Dec)
0000	Reserved				unsigned short int		2	0
0001	Voltage	R	V	0.1	unsigned short int		2	1
0002	Ampere	R	A	0.01	unsigned short int		2	2
0003	Frequency	R	Hz	0.01	unsigned short int		2	3
0004	Thd-V	R	%	0.1	unsigned short int		2	4
0005	Thd-I	R	%	0.1	unsigned short int		2	5
0006	Cos	R		0.01	short int	neg => capacitive	2	6
0007	PF	R		0.01	short int		2	7
0008	Active Power	R	W	0.1	short int	neg => export	2	8
0009	Reactive Power	R	VAr	0.1	short int	neg => capacitive	2	9
Total Registers = 10								

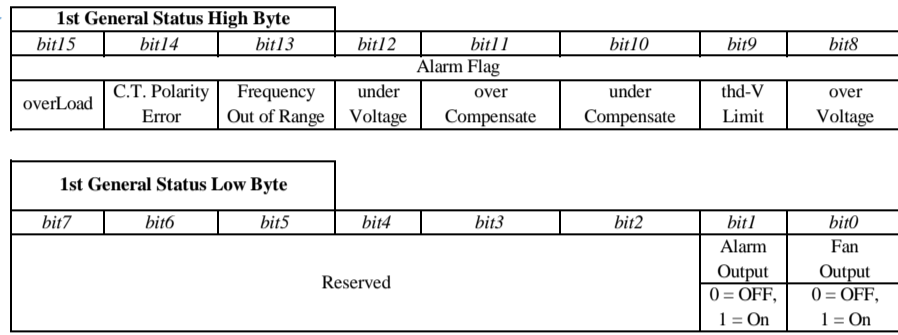
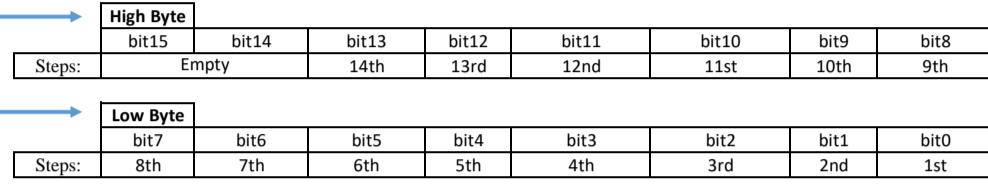
Cap Bank Status								
Reg Addr (Hex)	Register	(R/W)	Unit	Multiplier	Format	Comment	Reg Byte Count	Reg Addr (Dec)
000A	cap in use status	R		1	unsigned short int		2	10
000B	faulty cap status	R		1	unsigned short int		2	11
000C	cap operated more than 35k hrs status	R		1	unsigned short int		2	12
000D	1st general status	R		1	unsigned short int		2	13
000E	2nd general status	R		1	unsigned short int	Reserved	2	14
000F	3rd general status	R		1	unsigned short int		2	15
Total Registers = 6								

Voltage Harmonic Spectrum Parameter								
Reg Addr (Hex)	Register	(R/W)	Unit	Multiplier	Format	Comment	Reg Byte Count	Reg Addr (Dec)
0010	Reserved	R			unsigned short int		2	16
0011	V Spectrum H-order 1	R	V		unsigned short int		2	17
0012	V Spectrum H-order 2	R	V		unsigned short int		2	18
0013	V Spectrum H-order 3	R	V		unsigned short int		2	19
0014	V Spectrum H-order 4	R	V		unsigned short int		2	20
0015	V Spectrum H-order 5	R	V		unsigned short int		2	21
0016	V Spectrum H-order 6	R	V		unsigned short int		2	22
0017	V Spectrum H-order 7	R	V		unsigned short int		2	23
0018	V Spectrum H-order 8	R	V	0.1	unsigned short int		2	24
0019	V Spectrum H-order 9	R	V		unsigned short int		2	25
001A	V Spectrum H-order 10	R	V		unsigned short int		2	26
001B	V Spectrum H-order 11	R	V		unsigned short int		2	27
001C	V Spectrum H-order 12	R	V		unsigned short int		2	28
001D	V Spectrum H-order 13	R	V		unsigned short int		2	29
001E	V Spectrum H-order 14	R	V		unsigned short int		2	30
001F	V Spectrum H-order 15	R	V		unsigned short int		2	31
Total Registers = 16								

Ampere Harmonic Spectrum Parameter (Secondary Value)								
Reg Addr (Hex)	Register	(R/W)	Unit	Multiplier	Format	Comment	Reg Byte Count	Reg Addr (Dec)
0020	Reserved	R			unsigned short int		2	32
0021	I Spectrum H-order 1	R	A		unsigned short int		2	33
0022	I Spectrum H-order 2	R	A		unsigned short int		2	34
0023	I Spectrum H-order 3	R	A		unsigned short int		2	35
0024	I Spectrum H-order 4	R	A		unsigned short int		2	36
0025	I Spectrum H-order 5	R	A		unsigned short int		2	37
0026	I Spectrum H-order 6	R	A		unsigned short int		2	38
0027	I Spectrum H-order 7	R	A		unsigned short int		2	39
0028	I Spectrum H-order 8	R	A	0.01	unsigned short int		2	40
0029	I Spectrum H-order 9	R	A		unsigned short int		2	41
002A	I Spectrum H-order 10	R	A		unsigned short int		2	42
002B	I Spectrum H-order 11	R	A		unsigned short int		2	43
002C	I Spectrum H-order 12	R	A		unsigned short int		2	44
002D	I Spectrum H-order 13	R	A		unsigned short int		2	45
002E	I Spectrum H-order 14	R	A		unsigned short int		2	46
002F	I Spectrum H-order 15	R	A		unsigned short int		2	47
Total Registers = 16								

Cap Bank Utilization Hours								
Reg Addr (Hex)	Register	(R/W)	Unit	Multiplier	Format	Comment	Reg Byte Count	Reg Addr (Dec)
0030	k1 cap hours	R/W	sec		unsigned short int		4	48
0032	k2 cap hours	R/W	sec		unsigned short int		4	50
0034	k3 cap hours	R/W	sec		unsigned short int		4	52
0036	k4 cap hours	R/W	sec		unsigned short int		4	54
0038	k5 cap hours	R/W	sec		unsigned short int		4	56
003A	k6 cap hours	R/W	sec		unsigned short int		4	58
003C	k7 cap hours	R/W	sec		unsigned short int		4	60
003E	k8 cap hours	R/W	sec	8	unsigned short int		4	62
0040	k9 cap hours	R/W	sec		unsigned short int		4	64
0042	k10 cap hours	R/W	sec		unsigned short int		4	66
0044	k11 cap hours	R/W	sec		unsigned short int		4	68
0046	k12 cap hours	R/W	sec		unsigned short int		4	70
0048	k13 cap hours	R/W	sec		unsigned short int		4	72
004A	k14 cap hours	R/W	sec		unsigned short int		4	74
Total Registers = 28								

Cap Bank Switching Count								
Reg Addr (Hex)	Register	(R/W)	Unit	Multiplier	Format	Comment	Reg Byte Count	Reg Addr (Dec)
004C	k1 cap switched count	R/W			unsigned short int		2	76
004D	k2 cap switched count	R/W			unsigned short int		2	77
004E	k3 cap switched count	R/W			unsigned short int		2	78
004F	k4 cap switched count	R/W			unsigned short int		2	79
0050	k5 cap switched count	R/W			unsigned short int		2	80
0051	k6 cap switched count	R/W			unsigned short int		2	81
0052	k7 cap switched count	R/W			unsigned short int		2	82
0053	k8 cap switched count	R/W			unsigned short int		2	83
0054	k9 cap switched count	R/W			unsigned short int		2	84
0055	k10 cap switched count	R/W			unsigned short int		2	85
0056	k11 cap switched count	R/W			unsigned short int		2	86
0057	k12 cap switched count	R/W			unsigned short int		2	87
0058	k13 cap switched count	R/W			unsigned short int		2	88
0059	k14 cap switched count	R/W			unsigned short int		2	89
Total Registers = 14								



Cap Bank Iph Secondary Value								
Reg Addr (Hex)	Register	(R/W)	Unit	Multiplier	Format	Comment	Reg Byte Count	Reg Addr (Dec)
005A	k1 cap secondary Var	R	VAr	0.1	unsigned short int		2	90
005B	k2 cap secondary Var	R	VAr		unsigned short int		2	91
005C	k3 cap secondary Var	R	VAr		unsigned short int		2	92
005D	k4 cap secondary Var	R	VAr		unsigned short int		2	93
005E	k5 cap secondary Var	R	VAr		unsigned short int		2	94
005F	k6 cap secondary Var	R	VAr		unsigned short int		2	95
0060	k7 cap secondary Var	R	VAr		unsigned short int		2	96
0061	k8 cap secondary Var	R	VAr		unsigned short int		2	97
0062	k9 cap secondary Var	R	VAr		unsigned short int		2	98
0063	k10 cap secondary Var	R	VAr		unsigned short int		2	99
0064	k11 cap secondary Var	R	VAr		unsigned short int		2	100
0065	k12 cap secondary Var	R	VAr		unsigned short int		2	101
0066	k13 cap secondary Var	R	VAr		unsigned short int		2	102
0067	k14 cap secondary Var	R	VAr		unsigned short int		2	103
Total Registers = 14								

Cap Bank C/K ratio								
Reg Addr (Hex)	Register	(R/W)	Unit	Multiplier	Format	Comment	Reg Byte Count	Reg Addr (Dec)
0068	k1 cap c/k ratio	R		0.1	unsigned short int		2	104
0069	k2 cap c/k ratio	R			unsigned short int		2	105
006A	k3 cap c/k ratio	R			unsigned short int		2	106
006B	k4 cap c/k ratio	R			unsigned short int		2	107
006C	k5 cap c/k ratio	R			unsigned short int		2	108
006D	k6 cap c/k ratio	R			unsigned short int		2	109
006E	k7 cap c/k ratio	R			unsigned short int		2	110
006F	k8 cap c/k ratio	R			unsigned short int		2	111
0070	k9 cap c/k ratio	R			unsigned short int		2	112
0071	k10 cap c/k ratio	R			unsigned short int		2	113
0072	k11 cap c/k ratio	R			unsigned short int		2	114
0073	k12 cap c/k ratio	R			unsigned short int		2	115
0074	k13 cap c/k ratio	R			unsigned short int		2	116
0075	k14 cap c/k ratio	R			unsigned short int		2	117
Total Registers = 14								

Setting Parameter								
Reg Addr (Hex)	Register	(R/W)	Unit	Multiplier	Format	Data Value	Reg Byte Count	Reg Addr (Dec)
0F00	model	R	-	-	unsigned short int	fixed 0x200E	2	3840
0F01	firmware Ver, Map Ver	R	-	0.01	unsigned short int	100, 100	2	3841
0F02	C/K	R	-	0.01	unsigned short int	Auto = 0 or 1 ~ 80	2	3842
0F03	target cos	R	-	0.01	short int	85 ~ 99 ind, 100, 99 ~ 90 cap (neg)	2	3843
0F04	no.connected.steps	R	-	1	unsigned short int	1 ~ 14	2	3844
0F05	switching program	R	-	1	unsigned short int	Auto = 0, P-0 = 1, P-1 = 2, ..., P-7 = 8	2	3845
0F06	switching on time	R	sec	1	unsigned short int	1 ~ 250	2	3846
0F07	switching off time	R	sec	1	unsigned short int	1 ~ 250	2	3847
0F08	reconnection time	R	sec	5	unsigned short int	OFF = 0 or 1 ~ 180	2	3848
0F09	over voltage setting	R	V	1	unsigned short int	OFF = 0 or 200 ~ 260	2	3849
0F0A	thd-V setting	R	%	1	unsigned short int	OFF = 0 or 3 ~ 10	2	3850
0F0B	operation hour	R	min	1	unsigned int		4	3851
0F0D	1st general setting	R	-	1	unsigned short int		2	3853
0F0E	2nd general setting	R	-	1	unsigned short int		2	3854
Total Registers = 15								

2nd General Setting High Byte							
bit15	bit14	bit13	bit12	bit11	bit10	bit9	bit8
Empty							
-							

2nd General Setting Low Byte							
bit7	bit6	bit5	bit4	bit3	bit2	bit1	bit0
Empty							
Baud Rate							
Parity							
Communication							
000 = 300, 001 = 600							
010 = 1200, 011 = 2400							
100 = 4800, 101 = 9600							
110 = 19200, 111 = 28800							
00 = none, 01 = odd, 10 = even							
00 = Off, 01 = On							

1st General Setting High Byte							
bit15	bit14	bit13	bit12	bit11	bit10	bit9	bit8
Empty							
Fan Duty							
Network Type							
Static Duty Interval							
0 = On, 1 = Off							
0 = P-n, 1 = P-P							
000 = OFF, 001 = 10 mins, 010 = 15mins							
011 = 20mins, 100 = 30mins							
101 = 60mins, 110 = 90mins, 111 = 120mins							

1st General Setting Low Byte							
bit7	bit6	bit5	bit4	bit3	bit2	bit1	bit0
Keypad Lock							
Reserved							
C.T. Polarity Selection							
Frequency Selection							
Cap Bank Protection							
00 = Auto, 01 = Forward, 10 = Reverse							
00 = Auto, 01 = 50Hz, 10 = 60Hz							
00 = OFF, 01 = overVoltage, 10 = thd-V, 11 = ALL							

Voltage Waveform								
Reg Addr (Hex)	Register	(R/W)	Unit	Multiplier	Format	Data Value	Reg Byte Count	Reg Addr (Dec)
0100	V data pt <1:0>	R		1	short int		2	256
...	... (up to)	R		1	short int	
011F	V data pt <64:63>	R		1	short int		2	287
Total Registers = 32								

Ampere Waveform								
Reg Addr (Hex)	Register	(R/W)	Unit	Multiplier	Format	Data Value	Reg Byte Count	Reg Addr (Dec)
0200	I data pt <1:0>	R		1	short int		2	512
...	... (up to)	R		1	short int	
021F	I data pt <64:63>	R		1	short int		2	543
Total Registers = 32								