					raw (F	W, driver, plugin, data						lculated (datab	_						
id item Firmware HW/SW version	category	rounded with	type hard coded	_	byte	N/A	upper limit N/A	int	(raw)	unit (now) N/A	int (cal)	N/A	lower limit up	N/A	N/A	N/A	description	RMS noise	
Build time OXFF Build git			hard coded	2	byte byte	N/A N/A	N/A N/A	int		N/A N/A	int (cal)	Y-M-D h-m-s N/A	N/A N/A	N/A N/A	N/A N/A	N/A			
0x00 Metsense MAC 0x01 TMP112		2	hard coded i2c	2	byte byte	N/A 0		floa		N/A °C	float(binary32		N/A -40	N/A 125	N/A 1 °C	±1 °C			
HTU21D temperature 0x02 HTU21D humidity		2	i2c i2c	3	byte byte	0	0xFFFFF	floa	at	°C %RH	float	°C %RH	-40 0	125 100	0.01 °C 0.04 %RH	±2 %RH			
0x03 HIH4030 humidity BMP180 temperature	Wetsense	1	analog i2c	2	byte byte	0	0xFFFF	floa	at	%RH °C	float	%RH °C	-40	100 85	0.1 °C	±1 °C	-	s to be revised	
0x04 BMP180 pressure 0x05 PR103J2 temperature	Meta	2	i2c analog	2	byte byte	0	0xFFFF	floa	at	Pa °C	float	hPa °C	300 -55		0.01 hPa /1024 %RH	±0.05 °C	pressure rec		
0x06 TSL250RD MMA8452Q AccX		3	analog i2c	2	byte byte	0	0xFFFF	int		N/A mg		μw/cm2 mg	0.2	5000	78 µW/cm2 , 1g / 1024)	N/P ±20 mg		0.8 μV/√Hz 99 μg/√Hz	
MMA8452Q AccZ MMA8452Q AccZ		3	i2c i2c	2	byte byte	0	0xFFFF	floa		mg mg		mg mg	0		, 1g / 1024) , 1g / 1024)	±20 mg ±20 mg		99 μg/√Hz 99 μg/√Hz	
0x07 MMA8452Q AccMag 0x08 SPV1840LR5H-B		3 2	N/A analog	N/A 126	N/A byte	N/A		floa int		mg N/A		mg dB	0 of A		Norm of res -35 dBV/Pa	of AccX, Y, Z C/F	Signal to No	ise Ratio 62.5 dB(A), 100	- 10,000 Hz
0x09 TSYS01 temperature HMC5883L Strength Hx		2	i2c i2c	_	byte byte	0		floa		°C mG		°C mG	-40 -1.3	125 1.3	0.01 °C 92 mG/LSb	±0.5 °C - 2° heading		Gain: 1090 LSb/Gauss	
HMC5883L Strength Hy HMC5883L Strength Hz		3	i2c i2c	_	byte byte	0	-	floa		mG mG		mG mG	-1.3 -1.3			- 2° heading - 2° heading		noise floor: 2 mG	
0x0A HMC5883L Change HIH6130 temperature		2	N/A i2c	N/A		N/A	N/A	floa	at	mG °C	float	mG °C				f MagX, Y, Z ±1 °C			
0x0B HIH6130 humidity 0x0C APDS-9006-020	9,	2	i2c	2	byte byte	0	0xFFFF	floa	at	%RH N/A	float	%RH Lux	10		0.04 %RH C/F			2.5 µV	
0x0D TSL260	Lightsense	3	i2c i2c	2	byte	0	0xFFFF	int	(raw)	N/A	float	μw/m2	0.2	56.8	84 μW/cm2	N/P		2.5 μV + 0.8 μV/√Hz	
0x0E TSL250 0x0F MLX75305	Ĭ	3	i2c	2	byte byte	0	0xFFFF	int		N/A N/A	float	μw/m2 μw/m2	0.2 C/F	C/F	78 µW/cm2 C/F		500 - 1,000		
0x10 ML8511		3	i2c	2	byte	0	0xFFFF	int	(raw)	N/A	int (caled)	N/A (index)	0	10	C/F	C/F		2.5 μV	
0x13 TMP421		2	i2c	2	byte	0	0xFFFF	floa	at	°C	float	°C	-40	125	for 2nd byte	.25 ~ 2.5 °C			
0x15 Total reducing gases (TOR, IRR)		2		N/A	N/A	N/A	N/A	int	(raw)	N/A	float	ppm	0	20	N/P	(sensitivity)			
0x16 Chem FW Config 0x17 Nitrogen dioxide		2			byte N/A	N/A N/A	-		N/A (raw)	N/A N/A	N/A float	N/A ppm	N/A 0	N/A 20	N/A < 20 ppb	N/A (sensitivity)			
0x18 Ozone 0x19 Hydrogen sulphide		2 2		N/A	N/A N/A	N/A N/A		int	(raw)	N/A N/A	float	ppm	0	20 50	< 20 ppb	(sensitivity)			
0x1A Total oxidizing gases (Tox, IAQ) 0x1B Carbon monoxide		2 2	1	N/A	N/A N/A	N/A N/A	N/A	int		N/A N/A	float	ppm ppm	0.1	100	N/P	(sensitivity) (sensitivity)			
0x1C Sulfur dioxide SHT25 temperature		2 2	1	N/A	N/A N/A	N/A N/A	N/A	int	(raw) (raw)	N/A 100th °C	float	ppm °C	0.5	20 125		(sensitivity) t (sensitivity) ±0.2 °C			
0x1D SHT25 humidity		2	1	N/A	N/A	N/A	N/A	int	(raw)	100th %RH	float	%RH	0	100	(8 bit) %RH	±1.8 %RH			
LPS25H temperature 0x1E LPS25H pressure		2 2	1	N/A	N/A N/A	N/A N/A	N/A	int	(raw)	100th °C hPa	float	°C Pa	-30 260	1260	480 LSB/°C 96 LSB/hPa				
Si1445 UV intensity Si1445 visible light intensity	ense	2 2	ļ	N/A	N/A N/A	N/A N/A	N/A	int		N/A N/A	float	N/A (index)	0	10	N/P N/P				
0x1F Si1445 proximity 0x20 Chemsense MAC	Chemsense	2	rs232 - serial3	N/A	N/A N/A	N/A N/A	N/A	str	(raw) ing	N/A N/A	string	cm (TBD) N/A	N/P N/A	N/P N/A	N/P N/A				
0x21 CO ADC temperature 0x22 IAQ IRR ADC temperature	-	2	1	N/A	N/A N/A	N/A N/A	N/A	int	(raw)	100th °C 100th °C		ပိ	N/P N/P	N/P N/P	N/P N/P				
0x23 O3 NO2 ADC temperature 0x24 SO2 H2S ADC temperature		2 2	1	N/A N/A	N/A N/A	N/A N/A			(raw)	100th °C 100th °C		ပ္	N/P N/P	N/P N/P	N/P N/P	N/P N/P			
0x25 CO LMP temperature Accelerometer X		2 2	1	_	N/A N/A	N/A N/A	N/A N/A	-	(raw)	100th °C N/A		°C g	N/P N/P	N/P N/P	N/P N/P	N/P N/P			
Accelerometer Y Accelerometer Z		2 2	1	N/A N/A	N/A N/A	N/A N/A	+			N/A N/A	float float	g g	N/P N/P	N/P N/P	N/P N/P	N/P N/P			
0x26 Accelerometer Vibration Gyro X		2		N/A	N/A N/A	N/A N/A	N/A	int	(raw)	N/A N/A	float	g °/s	N/P N/P	N/P N/P	N/P N/P				
Gyro Y Gyro Z		2 2	1	N/A	N/A N/A	N/A N/A	N/A	int	(raw)	N/A N/A	float	°/s	N/P N/P	N/P N/P	N/P N/P				
0x27 Gyro orientation index		2		N/A	N/A	N/A	N/A			N/A		°/s	N/P	N/P	N/P				
Histogram bin count Histogram average time					byte	62													
Histogram sample flow rate Histogram temp / pressure (alter)	Soci			4	byte byte														
Histogram sampling period Histogram sum of the count	Alpha sensor		spi	2	byte byte														
Histogram PM 1 Histogram PM 2.5	Ā	3			byte														
0x28 Histogram PM 10 0x29 Serial		3		4	byte														
0x2A All Chemsense 0x2B Status, alpha	Chemsense Alpha sensor		rs232 - serial3 spi	256 (re		N/A			N/A (raw)	N/A N/A	N/A string	N/A N/A	N/A N/A	N/A N/A	N/A N/A		only case to	collect data from chem	
UNES COMMON COMM	7 aprila concor		Op.		5,0				((a))	10/1	ouring .	1471	7.07	1471		1471			
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Configuration bin boundaries Configuration bin particle volumes Configuration bin particle dencities Configuration bin sample volume weightings B Configuration gain scaling coefficient Configuration sampling flow rate Configuration laser DAC Configuration an DAC Configuration conversion factor 0x31 Configuration spare bytes 0x2C Rain gauge	Rain Soursou	2 2 2	spi	32 64 64 64 4 1 1 1 21	byte byte byte byte byte byte byte byte	235	0xFFFF			N/A N/A		inch % VWC or m3	0 0 or 0	5 in/h 100 or 1	0.01 inch		currently ma		
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0x61	wagman_mediaselect_ep wagman_heartbeat_nc				5 uint 4 uint															
	wagman_heartbeat_ep wagman_heartbeat_cs				4 uint 4 uint															
	wagman_heartbeat_port4 wagman_heartbeat_port5				4 uint 4 uint															
	wagman_lastboot_nc wagman_lastboot_ep				4 float	uint32 uint32														
	wagman_lastboot_cs wagman_lastboot_port4				4 float	uint32 uint32														
0x63	wagman_lastboot_port5				4 float	uint32														
	wagman_powerfault_nc wagman_powerfault_ep				4 float 4 float															
	wagman_powerfault_cs wagman_powerfault_port4				4 float 4 float															
0x64	wagman_powerfault_port5 wagman_bootattempt_nc				4 float 1 uint															
	wagman_bootattempt_nc wagman_bootattempt_nc				1 uint 1 uint															
	wagman_bootattempt_nc wagman_bootattempt_nc				1 uint 1 uint															
0x66	wagman_rtc				4 uint															
0x70	nc_machine_id				2 byte	byte[32]														
0x71	nc_boot_id nc_cpu_temp			3	2 byte	byte[32] uint24														
	nc_ram_total nc_ram_free				2 float	uint32 uint32														
	nc_current_disk_type				2 byte	chr														
	nc_alternate_disk_type nc_partition1_total					unit24														
	nc_partition1_used nc_partition2_total					unit24 unit24														
	nc_partition2_used nc_partition3_total					unit24 unit24														
0x75	nc_partition3_used nc_current_time					unit24 unit32														
	nc_uptime nc_idletime				4 uint	unit32 unit32														
3,10	nc_load_1 nc_load_5				2 float	binary32 binary32														
0x77	nc_load_10				2 float	binary32														
	nc_ipaddress_octet1 nc_ipaddress_octet2				1 uint 1 uint	unit8														
	nc_ipaddress_octet3 nc_ipaddress_octet4				1 uint 1 uint	unit8														
	nc_hbmode nc_lock_fs			0.12	6 str 5 uint	chr														
0x7A	nc_lock_pw beehive_ping			0.12	5 uint 5 uint	chr														
0x7B	beehive_sshd nc_local_sshd			0.12	5 uint uint	chr														
	nc_devices_alphasense nc_devices_metsense			0.12	uint uint	chr														
0x7C	nc_devices_modem nc_devices_wagman			0.12	uint uint	chr														
	nc_ver_core_mi				1 uint 1 uint	uint8														
	nc_ver_core_p	itroller			1 uint 1 uint	uint8														
	nc_ver_nodecontroller_mj nc_ver_nodecontroller_mi	NodeController			1 uint 1 uint 1 uint	uint8														
	nc_ver_nodecontroller_p nc_ver_plugin_manager_mi	ž			1 uint	uint8														
0x7D	nc_ver_plugin_manager_mi nc_ver_plugin_manager_p				1 uint 1 uint	uint8														
	nc_rabbitmq_queues_data nc_rabbitmq_exchanges_data			0.12	5 uint 5 uint	chr														
0x7E	nc_rabbitmq_shovels_data nc_rabbitmq_shovels_images			0.12	5 uint uint	chr														
	nc_services_rabbitmq_uptime nc_services_rabbitmq_exitcode				1 uint															
	nc_services_rabbitmq_state nc_services_rabbitmq_substate				5 uint 5 uint															
	nc_services_init_uptime nc_services_init_exitcode				4 float 1 uint	uint32 int8														
	nc_services_init_state nc_services_init_substate				5 uint 5 uint															
	nc_services_heartbeat_uptime nc_services_heartbeat_exitcode					uint32														
	nc_services_heartbeat_state			0	5 uint	IIIO														
	nc_services_heartbeat_substate nc_services_epoch_uptime				4 float	uint32														
	nc_services_epoch_exitcode nc_services_epoch_state			0	1 uint 5 uint	IIILO														
	nc_services_epoch_substate nc_services_reversetunnel_uptime					uint32														
	nc_services_reversetunnel_exitcode nc_services_reversetunnel_state			0	1 uint 5 uint	int8														
	nc_services_reversetunnel_substate nc_services_wagmandriver_uptime					uint32														
	nc_services_wagmandriver_exitcode nc_services_wagmandriver_state			0	1 uint 5 uint	int8														
	nc_services_wagmandriver_substate nc_services_wwan_uptime				5 uint 4 float	uint32														
	nc_services_wwan_exitcode nc_services_wwan_state				1 uint 5 uint															
	nc_services_wwan_substate ep_machine_id			0	5 uint	byte[32]														
0x81	ep_boot_id ep_cpu_temp			3	2 byte	byte[32] uint24														
	ep_ram_total ep_ram_free				2 float	uint32 uint32														
2,00	ep_rain_itee ep_current_disk_name ep_current_disk_type				7 byte 2 byte															
	ep_alternate_disk_rype ep_alternate_disk_name ep_alternate_disk_type				7 byte 2 byte															
	ep_partition1_total				2 float	unit24														
	ep_partition1_used ep_partition2_total				2 float	unit24 unit24														
	ep_partition2_used ep_partition3_total				2 float	unit24 unit24														
0x85	ep_partition3_used ep_current_time				4 float	unit24 unit32														
0x86	ep_uptime ep_idletime				4 uint	unit32 unit32														
	ep_load_1 ep_load_5					binary32 binary32														
0x87	ep_load_10 ep_ipaddress_octet1					binary32														
	ep_ipaddress_octet1 ep_ipaddress_octet1				1 uint 1 uint	uint8														
	ep_ipaddress_octet1 ep_hbmode				1 uint 6 str	uint8														
	ep_lock_fs ep_lock_pw	Sessor		0.12	5 uint 5 uint	chr														
	ep_devices_camera_bottom	EdgeProcessor		0.12	5 uint	chr														
	ep_devices_camera_top ep_devices_microphone	Ē		0.12	uint uint	chr														
	ep_ver_core_mi ep_ver_core_mi				1 uint 1 uint	uint8														
	ep_ver_core_p ep_ver_edge_processor_mj				1 uint 1 uint															
	ep_ver_edge_processor_mi ep_ver_edge_processor_p				1 uint 1 uint	uint8														
	ep_ver_plugin_manager_mj ep_ver_plugin_manager_mi				1 uint 1 uint	uint8														
	ep_ver_plugin_manager_p ep_rabbitmq_queues_data				1 uint 1 uint 5 uint	uint8														
	ep_rabbitmq_queues_images			0.12	5 uint 5 uint 5 uint	chr														
	ep_rabbitmq_exchanges_data ep_rabbitmq_exchanges_images			0.12	5 uint	chr														
	ep_services_rabbitmq_uptime	I			4 float	uint32														

					v (EM) driver	nlugin database(1)				-	alculated (date	haco2)					
item	category	rounded with	type	length typ		n, plugin, database1) lower limit upper limit	lenath	tyne (now)	unit (now)	type (goal)	alculated (data		upper limit	resolutor	Accuracy	description	RMS noise
ep_services_rabbitmq_exitcode	oatogory	Tourided will!	·/pc		nt int8	TOMOS III III Upper III III	rengul	Type (HOW)	STITE (TIOW)	Type (guai)	unit (guai)	IOWCI IIIIII	apper mill	.coolutoi1	, recuracy	acacription	. and Holde
ep_services_rabbitmq_state	_			0.5 uir													
ep_services_rabbitmq_substate				0.5 uir													
ep_services_init_uptime					at uint32												
ep_services_init_exitcode					nt int8												
ep_services_init_state				0.5 uir													
ep_services_init_substate				0.5 uir	nt												
ep_services_heartbeat_uptime				4 flo	at uint32												
ep_services_heartbeat_exitcode				1 uir	nt int8												
ep_services_heartbeat_state				0.5 uir	nt												
8E ep_services_heartbeat_substate				0.5 uir	nt												
net_broadband_rx				4 uir													
net_broadband_tx				4 uir													
net_lan_rx				4 uir	nt												
91 net_lan_tx				4 uir	nt												
net_usb_rx				4 uir	nt												
92 net_usb_tx				4 uir	nt												
audio_spl_octave1				4 flo	at binary32				dB								
audio_spl_octave2				4 flo	at binary32				dB								
audio_spl_octave3					at binary32				dB								
audio_spl_octave4					at binary32				dB								
audio_spl_octave5					at binary32				dB								
									dB								
audio_spl_octave6					at binary32												
audio_spl_octave7					at binary32				dB								
audio_spl_octave8					at binary32				dB								
audio_spl_octave9					at binary32				dB								
audio_spl_octave10					at binary32				dB								
93 audio_spl_octave_total				4 flo	at binary32				dB								
image_device					ar char[1]												
image_average_color_r				1	uint8												
image_average_color_g				1	uint8												
image_average_color_b				1	uint8												
image_histogram_r				17	char[17]												
image_histogram_g				17	char[17]												
NO image_histogram_b				17	char[17]												
image_detection_car				- "	uint8												
A1 image_detection_person					uint8												