



# SmartSwarm 341

## ASSET INTEGRATION GATEWAY



### SPECIFICATIONS

#### CELLULAR MODULE PARAMETERS

	SG303 series - EMEA	SG305 series - NATAM
LTE	Bit rate 100 Mbps (DL) / 50 Mbps (UL) Supported frequencies: 800/900/1800/2100/2600 MHz	Bit rate 100 Mbps (DL) / 50 Mbps (UL) Supported frequencies: 700/700/850/AWS (1700/2100)/1900 MHz
WCDMA	Bit rate 42.0 Mbps (DL) / 5.76 Mbps (UL) Supported frequencies: 900/1800/2100 MHz	Bit rate 42.0 Mbps (DL) / 5.76 Mbps (UL) Supported frequencies: 850/AWS (1700/2100)/1900 MHz
GPRS/EDGE	Bit rate 237 kbps (DL) / 59.2 kbps (UL) Supported frequencies: 900/1800 MHz	Bit rate 236 kbps (DL) / 59.2 kbps (UL) Supported frequencies: 850/900/1800/1900 MHz

#### WZZARD RADIO - 802.15.4E, 2.4 GHZ

Number of Channels	15
Channel Separation	5 MHz
Channel Clear Frequency	2405 + 5* (k-11) MHz
Modulation	IEEE 802.15.4 Direct Sequence Spread Spectrum (DSSS)
Raw Data Rate	250 kbps

Range (25 °C, 50% RH, +2 dBi omni-directional antenna, antenna 2m)	Indoor	100 m
	Outdoor	300 m
	Free Space	1200 m

Receiver Sensitivity	Packet Data Error Rate (PER) = 1%	-93 dBm
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Receiver Sensitivity	Packet Data Error Rate PER = 50%	-95 dBm
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Output Power (delivered to a 50 Ω load)	High Calibration Setting	8 dBm
	Low Calibration Setting	0 dBm

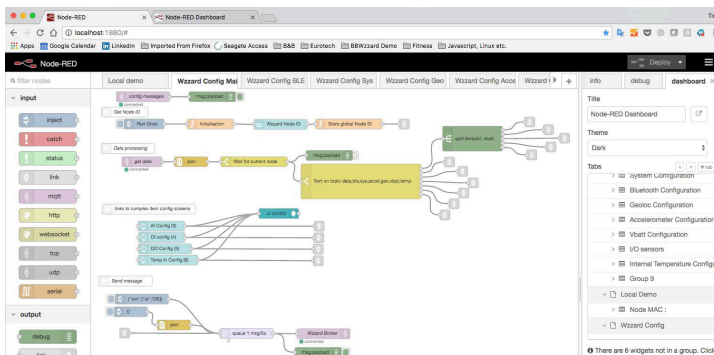
#### PORTS, LEDS, ANTENNAS

(2) Ethernet Ports	RJ45, 10/100 Mbps
SIM	(2) Mini SIM, 2FF, 1 supported (rear panel)
LED Indicators	PWR, DAT, WAN, ETH, SIM, USR, POE, IN0, IN1, OUT
Wzzard	R-SMA connector
RST	RESET button (rear panel)

\*Optional - 3x ANT - ANT, DIV SMA connectors

SD (USB)	Available for file storage from Node-RED applications (currently unsupported)
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\* Optional items sold separately.



NodeRED - easy drag and drop configuration

#### POWER

\*Optional - Power Supply 10 – 60 VDC (2-Way Molex connector)

Power Consumption	Idle: 2.5 W Average: 4 W Peak: 11 W Sleep Mode: 10mW
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#### ENVIRONMENTAL

Temperature Range	Operating: -40 to +75 °C Storage: -40 to +85 °C
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Temperature Range LTE450	Operating: -20 to +60 °C Storage: -40 to +85 °C
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Humidity	Operating: 0 to 95 % Storage (Non-condensing): 0 to 95 %
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Cold Start	-35 °C
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Operating Altitude	2000 m / 70 kPa
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Ingress Protection Rating	IP30
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#### MECHANICAL

Metal case with metal DIN rail

Dimensions	55 x 97 x 125 mm
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Weight	375 g
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#### INDUSTRY CERTIFICATIONS & APPROVALS

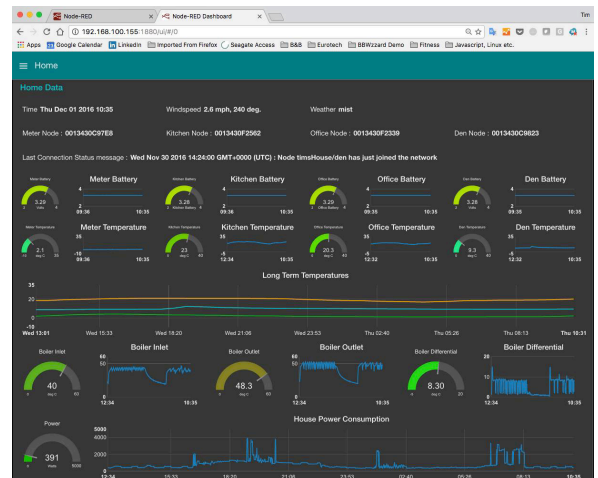
Radio for general LTE	ETSI EN 301 511 v9.0.2, ETSI EN 301 908-1 v5.2.1, ETSI EN 301 908-2 v5.2.1, ETSI EN 301 908-13 v5.2.1
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Emissions/Immunity	IEC 61000-6-2:2005, ETSI EN 301 489-1 v1.9.2, EN 55022:2010
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Safety	EN 60950-1:06 ed.2 (not Hazardous Locations), EN 62311:2008
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Vehicle	E8
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Environmental	RoHS, RoHS2, REACH, WEEE
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NodeRED - at-a-glance dashboards