



# Aircom™ End Node

Aircom™ is a self-contained, battery-powered LoRaWAN™ device capable of collating data from various instruments. It acts as a datalogger or RTU for monitoring applications. With its powerful ARM processor, it is capable of custom control configurations for specific applications. It has been designed for hazardous environments and transmits data to any Command Centre globally. It's easy to install and configure with its Mobile Bluetooth App and can be left to operate without the need for human intervention for years.

**Key Features:**

- Wide range of I/O – Analog, Digital and Serial
- Secure Data (AES 128)
- IP 68 enclosure
- Up to 10-year battery life – application dependent
- Powers instruments with 10-16VDC
- Up to 10+ mile range – installation and topography dependent
- External power option
- ATEX Zone 0 IIC and Class I, Div I Groups A-D T4
- Configure via the Aircom mobile app on iOS or Android
- Integrated I.S. barriers for each channel



General	
Material	ABS
Aircom Weight	1.14kg
Battery Weight	0.19kg
Aircom Dimensions H x W x D (mm)	467 x 120 x 75
Battery Dimensions H x D (mm)	83 x 51
Ingress Protection	IP68, NEMA 4X
Permissible ambient temperatures	-20°C to 60°C / -4°F to 140°F
Approvals / Certification	
ATEX	II 1G Ex ia IICT4 Ga (-20 ≤ Ta ≤ +60°C)
US Hazardous Area	Class I Div I Grps A-D,T4 & Class I Zone 0 AEx ia IICT4 Ga (-20 ≤ Ta ≤ +60°C)
Canada Hazardous Area	Ex ia IICT4 Ga (-20 ≤ Ta ≤ +60°C)
Directives	EN IEC 60079-0: 2018, EN 60079-11: 2012, ISA/UL 60079-0, ISA/UL60079-11, CSA-C22.2 No ISA/UL 60079-0, CSA-C22.2 No ISA/UL60079-11, UL 61010-1, UL 61010-2-201, CAN/CSA C22.2 No. UL 61010-1, CAN/CSA C22.2 UL 61010-2-201

Power	
Battery	3.6V, 19Ah, Lithium Thionyl Chloride
Auxiliary Power	7-23VDC, 2.1W Max
Communications	
LoRaWAN EU	868-870MHz
LoRaWAN US	902-928MHz
LoRaWAN AU	915-928MHz
LoRaWAN ASI	920-923MHz
LoRaWAN AS2	923-925MHz
LoRaWAN IN	865-867MHz
Inputs / Outputs	
x2 or x5 Analogue Channels	x2 HART, x2 <b>or</b> x5 <b>4-20mA Passive</b> , x2 4-20mA Active, x2 -10-10V, x2 PT100 3-Wire, x2 PT100 4-Wire, x2 PT1000, x2 Ohms, x2 POT, x2 mV
x4 Digital Input Channels	x4 Volt-Free, x2 Voltage input, x2 PRX NAMUR, x2 Counter
x2 or x5 Digital Outputs	x2 <b>or</b> x5 120mA @ 16.4VDC
x2 Serial Comms Channels	RS485



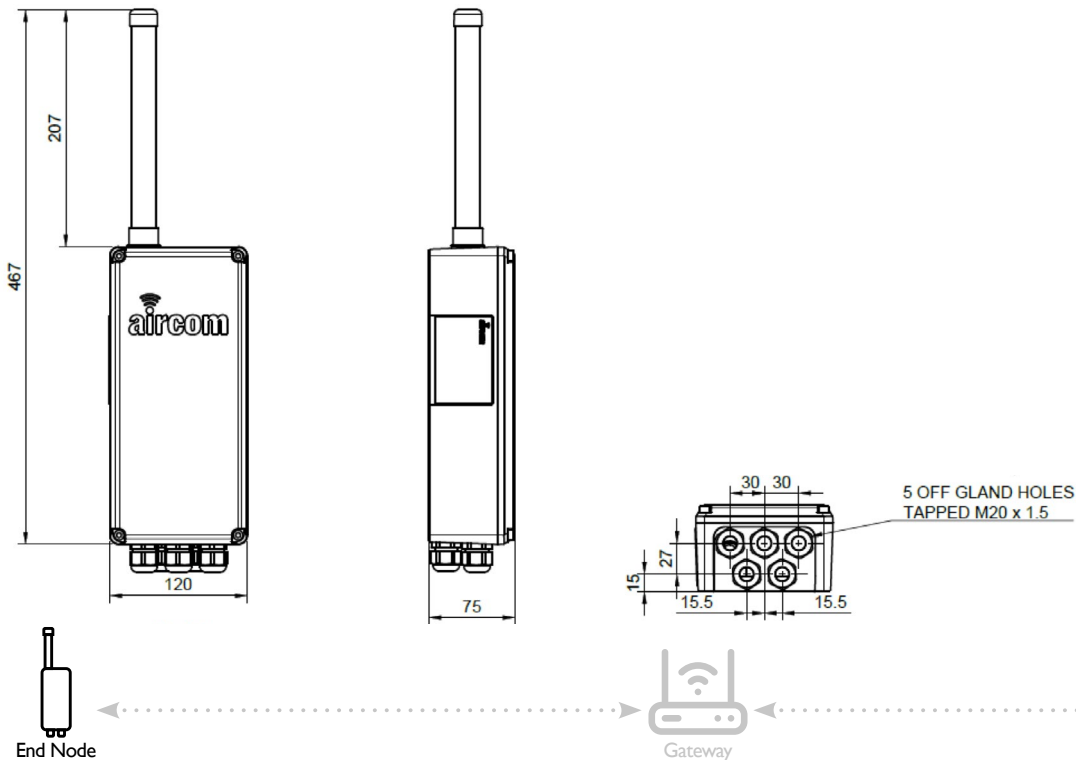


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## Part Code Builder

<b>Example Code</b>	<b>WTP03</b>	-	<b>Ex</b>	-	<b>AD485</b>	-	<b>EU868</b>	-	<b>S</b>
<b>Product Code</b>	WTP03								
Aircom End Node	WTP03								
<b>Hazardous Area Certification</b>									
Safe Area Only	00								
Hazardous Area	Ex								
<b>Inputs &amp; Outputs - See Power &amp; I/O Options Table</b>									
x2 AI / DO, x4 DI, x2 Serial	AD485								
x5 AI / DO, x4 DI, x2 Serial	HD485								
<b>Communications</b>									
LoRaWAN EU868-870MHz	EU868								
LoRaWAN US902-928MHz	US915								
LoRaWAN AU915-928MHz	AU915								
LoRaWAN AS920-923MHz	AS1								
LoRaWAN AS923-925MHz	AS2								
LoRaWAN IN865-867MHz	IN865								
<b>Antenna</b>									
Standard External Fixed	S								

## Dimensions









# Aircom™ End Node

Power and I/O Options		
Options	AD485	HD485
12-23VDC Auxiliary Power Input	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3.6V, 19Ah Lithium Thionyl Chloride Replaceable Battery	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Digital Inputs</b>	<b>Max 4*</b>	<b>Max 4*</b>
0-24VDC Voltage Inputs	x2	x2
Proximity Switch, NAMUR Type	x2	x2
Volt-Free or Pulse Inputs	x2	x2
Volt-Free Inputs	x2	x2
<b>Digital Outputs</b>	<b>Max 2*</b>	<b>Max 5*</b>
120mA @ 16.4VDC Digital Outputs	x2	x5
<b>Analogue Inputs</b>	<b>Max 2*</b>	<b>Max 5*</b>
4-20mA Passive	x2	x5
Hart®	x2	x2
4-20mA Active	x2	x2
-10-10V Input	x2	x2
PT100 3/4 Wire or PT1000	x2	x2
Thermocouple Type J or K	x2	x2
0-10k Resistance or Potentiometer Inputs	x2	x2
0-1.5V mV Inputs	x2	x2
<b>Serial Options</b>	<b>Max 2*</b>	<b>Max 2*</b>
RS485	x2	x2

\*Note: There is a maximum number of I/O that can be utilised for each variant. Example: AD485 has Max x2 Analogue Channels. Only 2 of the available analogue inputs can be used at one time such as x1 4-20mA and x1 PT100 at once or any other combination of two of the available input options.

## Accessories

Code	Description	
ZC-0003	Battery-ATEX	
ZC-0006	Wall Mount, includes: x2 304SS wall brackets x8 304SS thread forming screws	
ZC-0005	Post Mount, includes: x2 304SS post brackets x4 304SS M6 machine screws & nyloc nuts x2 304SS jubilee clips x8 304SS thread forming screws	
ZC-0009	Aircom Limiting Resistor	



WTP03-DS-001\_v1.4