Pinout comparison: Wavelet V2 versus Wavelet

Wavelet V2

Port #	Connection Type	Connector Type
1	Analog and 5th DIO	M12 8-pin male
2	Serial	M12 8-pin female
3	Discrete – 4 DIO	M12 5-pin male
4	Power	M8 3-pin male
ANT.	Antenna	SMA female

Wavelet

Port #	Connection Type	Connector Type
1	Analog	M12 8-pin male
2	Serial	M12 8-pin female
3	Discrete – 3 DIO	M12 5-pin male
4	Power	M8 3-pin male
ANT.	Antenna	SMA female

To provide 5 digital inputs/outputs, the Wavelet V2 devices have a slightly different pinout for the discrete and analog sensors ports than our previous Wavelet. The serial pinout has not changed.

In summary:

- In the discrete port (panel connector #3), pin #2 was formerly GND, but in the Wavelet V2 device, it is a digital signal called "IO_3". Pin #4 can still be used for GND.
- In the analog port (panel connector #1), pin #2 was formerly GND, but in the V2 device, it is a digital signal called "IO_4". Pin #8 can still be used for GND.

To differentiate between the two Wavelets, we have two different part numbers:

- For the classic Wavelet, the part number is **WA1111-*xx*** (*xx* represents the different models for US, EU, and SA)
- For the Wavelet V2 with 5 digital I/Os, the part number is. **WA1111-*xx*-V2** (*xx* represents the different models for US, EU, and SA)

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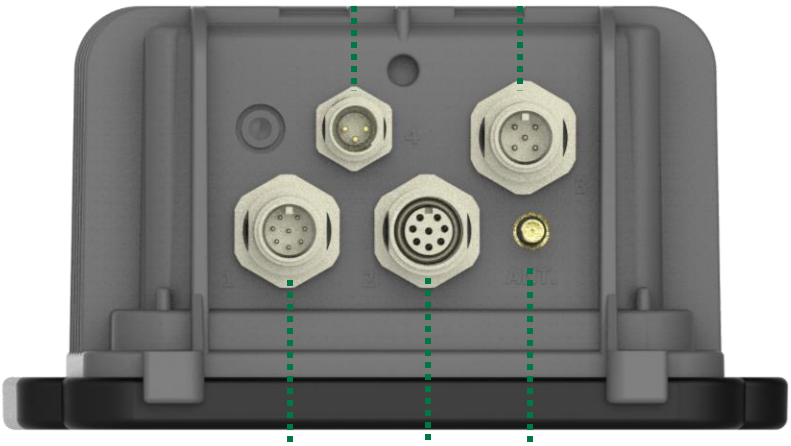
Pinout comparison: Wavelet V2 versus Wavelet

Wavelet V2

Wavelet

Front view

Bottom view



Panel connector #4
M8 3-pin male

Panel connector #3
M12 5-pin male

Panel connector #1
M12 8-pin male

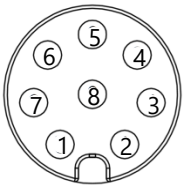
Panel connector #2
M12 8-pin female

Antenna connector
SMA female

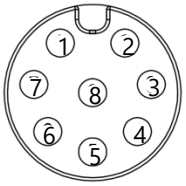
Pinout: Wavelet V2

Model#: WA1111-xx-V2

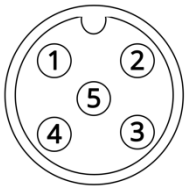
PANEL CONNECTOR #1 – M12 8-PIN MALE

Connector Pin #	Signal	Cable Connector Pin Assignment	
		Front	Back
1	4-20mA or 0-27.5V Input #1		
2	**IO_4 – periodic or output Dry contact, open drain, 0V or 2.8V (max)**		
3	Wavelet 12V Power Supply #2 (+)		
4	Wavelet 12V Power Supply #1 (+)		
5	4-20mA or 0-27.5V Input #4		
6	4-20mA or 0-27.5V Input #3		
7	4-20mA or 0-27.5V Input #2		
8	GND		

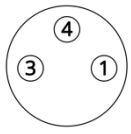
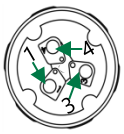
PANEL CONNECTOR #2 – M12 8-PIN FEMALE

Connector Pin #	Signal	Cable Connector Pin Assignment	
		Front	Back
1	RS232 TX		
2	Wavelet 12V Power Supply #4 (+)		
3	Wavelet 12V Power Supply #3 (+)		
4	SDI-12		
5	RS485 B		
6	RS485 A		
7	RS232 RX		
8	GND		

PANEL CONNECTOR #3 – M12 5-PIN MALE

Connector Pin #	Signal	Cable Connector Pin Assignment	
		Front	Back
1	PCNT_0 – pulse counting, edge, periodic, output Dry contact, open drain, 0V or 2.8V (max)		
2	**IO_3 – periodic or output Dry contact, open drain, 0V or 2.8V (max)**		
3	PCNT_1 – pulse counting, edge, periodic, output Dry contact, open drain, 0V or 2.8V (max)		
4	GND		
5	IO_2 – edge, periodic, output Dry contact, open drain, 0V or 2.8V (max)		

EXTERNAL POWER – PANEL CONNECTOR #4 – M8 3-PIN MALE

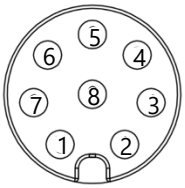
Connector Pin #	Signal	Cable Connector Pin Assignment	
		Front	Back
1	6-24VDC		
3	No Connection		
4	Negative (-)		

Pinout: Wavelet

Model#: WA1111-xx

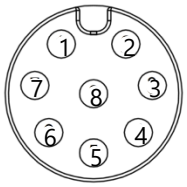
PANEL CONNECTOR #1 – M12 8-PIN MALE

Connector Pin #	Signal	Cable Connector Pin Assignment	
		Front	Back
1	4-20mA or 0-27.5V Input #1		
2	**GND**		
3	Wavelet 12V Power Supply #2 (+)		
4	Wavelet 12V Power Supply #1 (+)		
5	4-20mA or 0-27.5V Input #4		
6	4-20mA or 0-27.5V Input #3		
7	4-20mA or 0-27.5V Input #2		
8	GND		



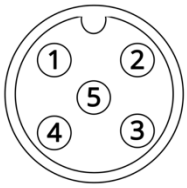
PANEL CONNECTOR #2 – M12 8-PIN FEMALE

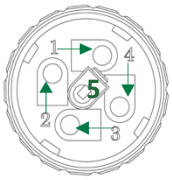
Connector Pin #	Signal	Cable Connector Pin Assignment	
		Front	Back
1	RS232 TX		
2	Wavelet 12V Power Supply #4 (+)		
3	Wavelet 12V Power Supply #3 (+)		
4	SDI-12		
5	RS485 B		
6	RS485 A		
7	RS232 RX		
8	GND		



PANEL CONNECTOR #3 – M12 5-PIN MALE

Connector Pin #	Signal	Cable Connector Pin Assignment	
		Front	Back
1	PCNT_0 – pulse counting, edge, periodic, output Dry contact, open drain, 0V or 2.8V (max)		
2	**GND**		
3	PCNT_1 – pulse counting, edge, periodic, output Dry contact, open drain, 0V or 2.8V (max)		
4	GND		
5	IO_2 – edge, periodic, output Dry contact, open drain, 0V or 2.8V (max)		





EXTERNAL POWER – PANEL CONNECTOR #4 – M8 3-PIN MALE

Connector Pin #	Signal	Cable Connector Pin Assignment	
		Front	Back
1	6-24VDC		
3	No Connection		
4	Negative (-)