

From: [Joel Mamalateo Deduyo](#)
To: [Joel Mamalateo Deduyo](#)
Cc: [Edwin Koh](#); [Pratheush Paleri](#); [Pratheush Paleri](#); [Amy Xu Xia Jie](#)
Subject: [EXT] RE: 2020 Q4 - 2021 Q2 Production Plan Changes - Flex - 16.Oct.2020
Date: Friday, 29 January, 2021 09:31:51
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

ATTENTION: This email originated from outside of the organization. Please do not open any attachments or click any links unless you recognize the sender and know the content is safe.

Hi HuaZhen,

Below is the calculation that we have for shunt capacity:

Product Family	Instrument PN	Product Family	Tester name	Qty	Test Time (hrs)	Tester Efficiency(%)	No of shifts	Shift allocation time (hrs)	Available Line Capacity (hrs):	Test capacity per day (pcs)
Detectors - Main Line	186015032 186015033/186018007 186015033 700011652/700011650 700011868/700011869 700011868	PDA/EIambda	Shunt	8	3.00	85.00%	1	8	64.00	18.13
Detectors - Main Line	186015032 186015033/186018007 186015033 700011652/700011650 700011868/700011869 700011868	PDA/EIambda	Shunt	14	3.00	85.00%	1	8	96.00	27.20

With present condition of delay of material issue and backlog recovery, we would like to improve flexibility to the capacity from 18 units to 27 units per day

Best Regards,
flex

Joel Mamalateo Deduyo
Senior Test Engineer
1 Kollong Place
Singapore 339211
direct: +65 6593 7044
mobile: +65 9485 8678
email: joelmamalateo.deduyo@flex.com
web: flex.com

From: HuaZhen Luo <HuaZhen_Luo@waters.com>
Sent: Friday, January 29, 2021 4:57 PM
To: Joel Mamalateo Deduyo <joelmamalateo.deduyo@flex.com>; Desmond Ann <Desmond_Ann@waters.com>
Cc: Edwin Koh <Edwin_Koh@waters.com>; Nallajanula Phani Bhushan <nallajanula@flex.com>; Pratheush Paleri <pratheush.paleri@flex.com>; Amy Xu Xia Jie <amy.xu@flex.com>
Subject: RE: 2020 Q4 - 2021 Q2 Production Plan Changes - Flex - 16.Oct.2020

Hi Joel,

As per discussion, please kindly update this justification with data ASAP. Otherwise we can only work on Capex Approval by next week. Thanks

Luo HuaZhen
Senior Test Engineer

Waters
THE SCIENCE OF
WHAT'S POSSIBLE.[®]
Waters Pacific Re Ltd
1 Science Park Road
#02-08 The Capricorn
Singapore Science Park II
Singapore 117528

(t) +65 6593 7044
(r) +65 6873 0820
(w) www.waters.com
(e) huaazhen_luo@waters.com
   

From: HuaZhen Luo
Sent: Friday, 29 January, 2021 09:49
To: Joel Mamalateo Deduyo <joelmamalateo.deduyo@flex.com>; Desmond Ann <Desmond_Ann@waters.com>
Cc: Edwin Koh <Edwin_Koh@waters.com>; Nallajanula Phani Bhushan <nallajanula@flex.com>; Pratheush Paleri <pratheush.paleri@flex.com>; Amy Xu Xia Jie <amy.xu@flex.com>
Subject: RE: 2020 Q4 - 2021 Q2 Production Plan Changes - Flex - 16.Oct.2020

Hi Joel,

Please kindly explain the justification for this 4 additional shunts request with data.
Why do you need these additional shunts?
Please get back to me by today, so that I can work on Capex approval for this request. Thanks

Luo HuaZhen
Senior Test Engineer

Waters
THE SCIENCE OF
WHAT'S POSSIBLE.[®]
Waters Pacific Re Ltd
1 Science Park Road
#02-08 The Capricorn
Singapore Science Park II
Singapore 117528

(t) +65 6593 7044
(r) +65 6873 0820
(w) www.waters.com
(e) huaazhen_luo@waters.com
   

From: Joel Mamalateo Deduyo <joelmamalateo.deduyo@flex.com>
Sent: Monday, 18 January, 2021 10:02
To: HuaZhen Luo <HuaZhen_Luo@waters.com>; Desmond Ann <Desmond_Ann@waters.com>
Cc: Edwin Koh <Edwin_Koh@waters.com>; Nallajanula Phani Bhushan <nallajanula@flex.com>; Pratheush Paleri <pratheush.paleri@flex.com>; Amy Xu Xia Jie <amy.xu@flex.com>
Subject: [EXT] RE: 2020 Q4 - 2021 Q2 Production Plan Changes - Flex - 16.Oct.2020

ATTENTION: This email originated from outside of the organization. Please do not open any attachments or click any links unless you recognize the sender and know the content is safe.

Hi HuaZhen,

We need additional 4x pcs Medium Shunts with PN: 28900226.
This is on top of the 2x Medium Shunt on loaned last Dec 2020.
This add'l 4x shunt has been agreed from last meeting in-between management.

Best Regards,
flex

Joel Mamalateo Deduyo
Senior Test Engineer
1 Kollong Place
Singapore 339211
direct: +65 6593 7044
mobile: +65 9485 8678
email: joelmamalateo.deduyo@flex.com
web: flex.com

From: HuaZhen Luo <HuaZhen_Luo@waters.com>
Sent: Friday, January 15, 2021 4:44 PM
To: Desmond Ann <Desmond_Ann@waters.com>; Joel Mamalateo Deduyo <joelmamalateo.deduyo@flex.com>
Cc: Edwin Koh <Edwin_Koh@waters.com>; Nallajanula Phani Bhushan <nallajanula@flex.com>
Subject: RE: 2020 Q4 - 2021 Q2 Production Plan Changes - Flex - 16.Oct.2020

Hi Joel,

Please kindly confirm you're requesting 4x pcs of additional Shunts with PN: 28900226.
Are this 4x pcs excluding the 2x shunts we loan to you for Q4 2020 or not?
Please get back to us by today. Thanks

Luo HuaZhen
Senior Test Engineer

Waters
THE SCIENCE OF
WHAT'S POSSIBLE.[®]
Waters Pacific Re Ltd
1 Science Park Road
#02-08 The Capricorn
Singapore Science Park II
Singapore 117528

(t) +65 6593 7044
(r) +65 6873 0820
(w) www.waters.com
(e) huaazhen_luo@waters.com
   

From: Desmond Ann <Desmond_Ann@waters.com>
Sent: Friday, 15 January, 2021 09:09
To: HuaZhen Luo <HuaZhen_Luo@waters.com>; Joel Mamalateo Deduyo <joelmamalateo.deduyo@flex.com>
Cc: Edwin Koh <Edwin_Koh@waters.com>; Nallajanula Phani Bhushan <nallajanula@flex.com>
Subject: RE: 2020 Q4 - 2021 Q2 Production Plan Changes - Flex - 16.Oct.2020

Hi HuaZhen,

Please see the email. I have re-attached the screenshot here.

From: Joel Mamatateo Deduyo <joelmamatateo.deduyo@flex.com>
Sent: Thursday, 14 January, 2021 08:42 PM
To: Desmond Ann <Desmond_Ann@waters.com>; HuaZhen Luo <HuaZhen_Luo@waters.com>
Cc: Edwin Koh <Edwin_Koh@waters.com>; Nallajanula Phani Bhushan <ghanibhushan.nallajanula@flex.com>
Subject: [EXT] RE: 2020 Q4 - 2021 Q2 Production Plan Changes - Flex - 16.Oct.2020

ATTENTION: This email originated from outside of the organization. Please do not open any attachments or click a

Hi Desmond,

1) Part number of the 4 shunts Flex is requesting
Medium Shunt PN : 289002226

2) The updated list of PM on all the shunts in Flex.
Refer to attached excel file as of 14 Jan 2021

Best Regards,

flex
Joel Mamatateo Deduyo
Senior Test Engineer

Regards,
Desmond.

Desmond Ann
Team Lead, Manufacturing
Waters Pacific Pte Ltd
phone +65 6593 7044 mobile +65 9873 7738
web www.waters.com email desmond_ann@waters.com
1 Science Park Road #02-08 The Capricorn Singapore 117528
[Facebook](#) | [LinkedIn](#) | [Twitter](#) | [YouTube](#)

From: HuaZhen Luo <HuaZhen_Luo@waters.com>
Sent: Friday, 15 January, 2021 09:07 AM
To: Desmond Ann <Desmond_Ann@waters.com>; Joel Mamatateo Deduyo <joelmamatateo.deduyo@flex.com>
Cc: Edwin Koh <Edwin_Koh@waters.com>; Nallajanula Phani Bhushan <ghanibhushan.nallajanula@flex.com>
Subject: RE: 2020 Q4 - 2021 Q2 Production Plan Changes - Flex - 16.Oct.2020

Hi Desmond,

I don't see how many Shunts requested by Flex.
Do you have number of shunts needed for each of part number? So that I can check our inventory and raise CEA as per your input. Thanks

Hi Joel,

When can you return the 2x loan shunts back to us since the Q4 production demand is fulfilled? Thanks

Luo HuaZhen
Senior Test Engineer
Waters
THE SCIENCE OF IT
WHAT'S POSSIBLE.™
(T) +65 6593 7044 Waters Pacific Pte Ltd
(M) +65 9873 7738 1 Science Park Road
(E) HuaZhen_Luo@waters.com #02-08 The Capricorn
Singapore Science Park II
Singapore 117528
[Twitter](#) | [LinkedIn](#) | [Facebook](#) | [YouTube](#)

From: Desmond Ann <Desmond_Ann@waters.com>
Sent: Friday, 15 January, 2021 08:50
To: Joel Mamatateo Deduyo <joelmamatateo.deduyo@flex.com>; HuaZhen Luo <HuaZhen_Luo@waters.com>
Cc: Edwin Koh <Edwin_Koh@waters.com>; Nallajanula Phani Bhushan <ghanibhushan.nallajanula@flex.com>
Subject: RE: 2020 Q4 - 2021 Q2 Production Plan Changes - Flex - 16.Oct.2020

Hi HuaZhen,

Will you be able to work with Joel on the shunts requirement and raise CEA/PO for this.

Please also review all the PM of the shunts and advise the location of the PM. Do give us an update during our next week department meeting.

Thank you.

Regards,
Desmond.

Desmond Ann
Team Lead, Manufacturing
Waters Pacific Pte Ltd
phone +65 6593 7044 mobile +65 9873 7738
web www.waters.com email desmond_ann@waters.com
1 Science Park Road #02-08 The Capricorn Singapore 117528
[Facebook](#) | [LinkedIn](#) | [Twitter](#) | [YouTube](#)

From: Joel Mamatateo Deduyo <joelmamatateo.deduyo@flex.com>
Sent: Thursday, 14 January, 2021 08:42 PM
To: Desmond Ann <Desmond_Ann@waters.com>; HuaZhen Luo <HuaZhen_Luo@waters.com>
Cc: Edwin Koh <Edwin_Koh@waters.com>; Nallajanula Phani Bhushan <ghanibhushan.nallajanula@flex.com>
Subject: [EXT] RE: 2020 Q4 - 2021 Q2 Production Plan Changes - Flex - 16.Oct.2020

ATTENTION: This email originated from outside of the organization. Please do not open any attachments or click any links unless you recognize the sender and know the content is safe.

Hi Desmond,

1. Part number of the 4 shunts Flex is requesting
Medium Shunt PN : 289002226
2. The updated list of PM on all the shunts in Flex.
Refer to attached excel file as of 14 Jan 2021

Best Regards,

flex
Joel Mamatateo Deduyo
Senior Test Engineer
1 Kolling Place
Singapore 397011
(direct) +65 6507 5952
(mobile) +65 9485 5678
(email) joelmamatateo.deduyo@flex.com
web flex.com

From: Desmond Ann <Desmond_Ann@waters.com>
Sent: Wednesday, January 13, 2021 3:18 PM
To: HuaZhen Luo <HuaZhen_Luo@waters.com>; Joel Mamatateo Deduyo <joelmamatateo.deduyo@flex.com>
Cc: Edwin Koh <Edwin_Koh@waters.com>; Nallajanula Phani Bhushan <ghanibhushan.nallajanula@flex.com>
Subject: RE: 2020 Q4 - 2021 Q2 Production Plan Changes - Flex - 16.Oct.2020

Hi Phani,

As a follow up from today meeting, please help to advise the below:

1. Part number of the 4 shunts Flex is requesting
2. The updated list of PM on all the shunts in Flex.

@HuaZhen_Luo Please help to check the availability of all the shunts if we can support Flex on the 4 shunts requested. Please provide the cost to our internal team and raise a CEA by this week for the replenishment as Edwin will require it to budget it with Alan since this was not accounted for when we do up the budget.

Thank you.

Regards,
Desmond.

Desmond Ann
Team Lead, Manufacturing
Waters Pacific Pte Ltd
phone +65 6593 7044 mobile +65 9873 7738
web www.waters.com email desmond_ann@waters.com
1 Science Park Road #02-08 The Capricorn Singapore 117528
[Facebook](#) | [LinkedIn](#) | [Twitter](#) | [YouTube](#)

From: HuaZhen Luo <HuaZhen_Luo@waters.com>
Sent: Wednesday, 16 November, 2020 05:36 PM
To: Desmond Ann <Desmond_Ann@waters.com>; Joel Mamatateo Deduyo <joelmamatateo.deduyo@flex.com>
Cc: Edwin Koh <Edwin_Koh@waters.com>; Nallajanula Phani Bhushan <ghanibhushan.nallajanula@flex.com>; Aldwin Pilapi <aldwin.pilapi@flex.com>
Subject: RE: 2020 Q4 - 2021 Q2 Production Plan Changes - Flex - 16.Oct.2020

Hi Joel,

As mentioned just now, please note down the serial numbers for 2x shunts.
And keep record before/after loan with the PM measurement and energy data per PM is provided when returning.
Thanks

Luo HuaZhen
Senior Test Engineer
Waters
THE SCIENCE OF IT
WHAT'S POSSIBLE.™
(T) +65 6593 7044 Waters Pacific Pte Ltd
(M) +65 9873 7738 1 Science Park Road
(E) HuaZhen_Luo@waters.com #02-08 The Capricorn
Singapore Science Park II
Singapore 117528
[Twitter](#) | [LinkedIn](#) | [Facebook](#) | [YouTube](#)

From: Desmond Ann <Desmond_Ann@waters.com>
Sent: Monday, 9 November, 2020 15:53
To: Joel Mamatateo Deduyo <joelmamatateo.deduyo@flex.com>; HuaZhen Luo <HuaZhen_Luo@waters.com>
Cc: Edwin Koh <Edwin_Koh@waters.com>; Nallajanula Phani Bhushan <ghanibhushan.nallajanula@flex.com>; Aldwin Pilapi <aldwin.pilapi@flex.com>
Subject: RE: 2020 Q4 - 2021 Q2 Production Plan Changes - Flex - 16.Oct.2020

Hi Joel,

I use your attached excel and key in 7 shunt instead of 8 and it is still within 89% utilization. I do not see there is a need to 3 extra, 2 extra medium shunts should be sufficient. Before use in production and before return to Waters, please published the PM measurement and energy results.

[#HuaZhen Luo](#) Please help to arrange for 2x medium shunts and ensure that the PM measurement and energy data per PM is provided.

Status	Product Family	Instrument P/N	Product Family	Tester name	Tester name	Test Time (hr)	Tested (y%)	No of shunts	Shift Allocation (line hrs)	Available Line Capacity (hr)	Line capacity per day (hr)	Remarks	Monthly demand (Dec 20)	Monthly Utilization %	Remarks
Present	Desmond + Main Line	1800F033 1800F033 7000T855 7000T855	PCA + Eureka	Med Shunt	TES2882	3.00	90.00%	1	8	43.00	10.67	Shunt PCA, eLAPEDA, and APC FAMILY.	322	125.78%	Med. Shunts are being used for PCA, eLAPEDA and other present. Currently we have 5x. Based on new demand 322 units in Dec 20 and current shunt capacity at line we are unable to meet the capacity. require. Need additional 3x Med. shunts to ensure adequate supply at BCC.
Inside demand	Desmond + Main Line	1800F033 1800F033 7000T855 7000T855	PCA + Eureka	Med Shunt	TES2882	3.00	90.00%	1	8	56.00	14.93	Shunt 2393 PCA, eLAPEDA, and APC FAMILY.	322	88.84%	

1. Impact by loss comm issue or in recovery mode
2. Present Medium Shunt Capacity required to have Q1 to recover from the line

Thank you.

Regards,
Desmond.

Desmond Ann
Team Lead, Manufacturing
Waters Pacific Pte Ltd
phone: +65 6593 7082 mobile: +65 9873 7738
web: [www.waters.com](#) email: [desmond.ann@waters.com](#)
1 Science Park Road #02-08 The Capriem Singapore 117528
[facebook](#) | [linkedin](#) | [twitter](#) | [youtube](#)

From: Joel Mamalateo Deduyo <[joelmamalateo.deduyo@flex.com](#)>

Sent: Monday, 9 November, 2020 03:40 PM

To: Desmond Ann <[Desmond_Ann@waters.com](#)>; HuaZhen Luo <[HuaZhen_Luo@waters.com](#)>

Cc: Edwin Koh <[Edwin_Koh@waters.com](#)>; Nallajanula Phani Bhushan <[ghanibhushan.nallajanula@flex.com](#)>; Aldwin Pilapil <[aldwin.pilapil@flex.com](#)>

Subject: [EXT] RE: 2020 Q4 - 2021 Q2 Production Plan Changes - Flex - 16.Oct.2020

ATTENTION: This email originated from outside of the organization. Please do not open any attachments or click any links unless you recognize the sender and know the content is safe.

Hi Desmond,

With Dec 2020 demand of 322x units, using 5x shunt will get us a utilization of 125.78%. To bring down the shunt utilization to 78.61%, we need add'l 3x medium shunt.

Pls. refer to Medium Shunt of Q4'20 reviewed that I attached.

Best Regards,

flex

Joel Mamalateo Deduyo
Senior Test Engineer

1 Kollong Place
Singapore 339211
direct: +65 4307 5982
mobile: +65 9485 8678
email: [joelmamalateo.deduyo@flex.com](#)
web: [flex.com](#)

From: Desmond Ann <[Desmond_Ann@waters.com](#)>

Sent: Monday, November 9, 2020 12:23 PM

To: Joel Mamalateo Deduyo <[joelmamalateo.deduyo@flex.com](#)>; HuaZhen Luo <[HuaZhen_Luo@waters.com](#)>

Cc: Edwin Koh <[Edwin_Koh@waters.com](#)>; Nallajanula Phani Bhushan <[ghanibhushan.nallajanula@flex.com](#)>; Aldwin Pilapil <[aldwin.pilapil@flex.com](#)>

Subject: RE: 2020 Q4 - 2021 Q2 Production Plan Changes - Flex - 16.Oct.2020

Hi Joel,

How many additional shunts will you need for Dec?

Regards,
Desmond.

Desmond Ann
Team Lead, Manufacturing
Waters Pacific Pte Ltd
phone: +65 6593 7082 mobile: +65 9873 7738
web: [www.waters.com](#) email: [desmond.ann@waters.com](#)
1 Science Park Road #02-08 The Capriem Singapore 117528
[facebook](#) | [linkedin](#) | [twitter](#) | [youtube](#)

From: Joel Mamalateo Deduyo <[joelmamalateo.deduyo@flex.com](#)>

Sent: Monday, 9 November, 2020 11:48 AM

To: Desmond Ann <[Desmond_Ann@waters.com](#)>; HuaZhen Luo <[HuaZhen_Luo@waters.com](#)>

Cc: Edwin Koh <[Edwin_Koh@waters.com](#)>; Nallajanula Phani Bhushan <[ghanibhushan.nallajanula@flex.com](#)>; Aldwin Pilapil <[aldwin.pilapil@flex.com](#)>

Subject: [EXT] RE: 2020 Q4 - 2021 Q2 Production Plan Changes - Flex - 16.Oct.2020

ATTENTION: This email originated from outside of the organization. Please do not open any attachments or click any links unless you recognize the sender and know the content is safe.

Hi Desmond,

We are able to cope-up for Nov 2020 but need medium shunts on Dec 2020 to cope-up with demand.

Yes, we need add'l medium shunt for Dec 2020 number only.

We can arrange to return add'l shunt that you will release for us once demand goes down.

Best Regards,

flex

Joel Mamalateo Deduyo
Senior Test Engineer

1 Kollong Place
Singapore 339211
direct: +65 4307 5982
mobile: +65 9485 8678
email: [joelmamalateo.deduyo@flex.com](#)
web: [flex.com](#)

From: Desmond Ann <[Desmond_Ann@waters.com](#)>

Sent: Monday, November 9, 2020 11:31 AM

To: Joel Mamalateo Deduyo <[joelmamalateo.deduyo@flex.com](#)>; HuaZhen Luo <[HuaZhen_Luo@waters.com](#)>

Cc: Edwin Koh <[Edwin_Koh@waters.com](#)>; Nallajanula Phani Bhushan <[ghanibhushan.nallajanula@flex.com](#)>; Aldwin Pilapil <[aldwin.pilapil@flex.com](#)>

Subject: RE: 2020 Q4 - 2021 Q2 Production Plan Changes - Flex - 16.Oct.2020

Hi Joel,

Based on what I am reading from what your email below, the production is able to cope for the Q3 and Q4 capacity with the current number of shunts. So you will need any extra medium shunts currently.

Do let me know if I understand wrongly.

Thank you.

Regards,
Desmond.

Desmond Ann
Team Lead, Manufacturing
Waters Pacific Pte Ltd
phone: +65 6593 7082 mobile: +65 9873 7738
web: [www.waters.com](#) email: [desmond.ann@waters.com](#)
1 Science Park Road #02-08 The Capriem Singapore 117528
[facebook](#) | [linkedin](#) | [twitter](#) | [youtube](#)

From: Joel Mamalateo Deduyo <[joelmamalateo.deduyo@flex.com](#)>

Sent: Wednesday, 4 November, 2020 05:41 PM

To: Desmond Ann <[Desmond_Ann@waters.com](#)>; HuaZhen Luo <[HuaZhen_Luo@waters.com](#)>

Cc: Edwin Koh <[Edwin_Koh@waters.com](#)>; Nallajanula Phani Bhushan <[ghanibhushan.nallajanula@flex.com](#)>; Aldwin Pilapil <[aldwin.pilapil@flex.com](#)>

Subject: [EXT] RE: 2020 Q4 - 2021 Q2 Production Plan Changes - Flex - 16.Oct.2020

ATTENTION: This email originated from outside of the organization. Please do not open any attachments or click any links unless you recognize the sender and know the content is safe.

Hi Desmond,

Below is the schedule for the upside:

Forecast	Nov-20	Dec-20
186015032	72	144
186015033	72	178

Attached is the calculation I get for medium shunt at cycle time set at 3 hours.

And also, below is the Drift Test that has been perform for Oct 2020. Best Drift Test count to pass is on 11 run count which can be translated to 220 mins or 3.6 hours. That 3.6 hours is excluding the Loss Comm.

OCT 2020 Drift Run Count:

PART NUMBER	Material Description	WPPL Current Plan										WPPL Previous Plan to CM										Delta										
		Q1-20	Q2-20	Q3-20	Q4-20	Q1-21	Q2-21	Q3-21	Q4-21	2021	Q1-20	Q2-20	Q3-20	Q4-20	Q1-21	Q2-21	Q3-21	Q4-21	2021	Q1-20	Q2-20	Q3-20	Q4-20	2020	2021	Q1-21	Q2-21	Q3-21	Q4-21	2021		
186015001	ACQUITY Binary Solvent Manager	62	31	27	91	211	18	31	42	40	131	62	31	27	71	191	33	36	42	40	151	0	0	0	20	20	(15)	(5)	0	0	0	
186015080	ACQUITY UPLC H-Class QSM PLUS	460	282	325	677	1,744	327	320	603	873	2,123	460	282	325	627	1,694	372	320	603	873	2,173	0	0	0	50	50	(50)	0	0	0	0	
186015031	ACQUITY UPLC TUV Detector X	170	157	208	299	834	157	219	203	263	842	170	157	208	276	811	180	219	203	263	865	0	0	0	23	23	(23)	(23)	0	0	0	
186015032	ACQUITY UPLC PDA Detector	230	144	155	312	841	117	181	193	250	741	230	144	155	274	803	155	181	193	250	779	0	0	0	38	38	(38)	0	0	0	0	
186015093	ACQUITY UPLC PDA eXtenda Detector	170	96	141	315	722	93	133	147	163	536	170	96	141	293	700	115	133	147	163	558	0	0	0	22	22	(22)	(22)	0	0	0	
186002487	2489 UV/Vis Detector	87	72	35	127	321	41	59	65	61	226	87	72	35	107	301	61	59	65	61	246	0	0	0	20	20	(20)	0	0	0	0	0
186002998	2998 PHOTODIODE ARRAY DETECTOR	37	49	32	63	181	24	46	52	61	183	37	49	32	48	166	39	46	52	61	198	0	0	0	15	15	(15)	0	0	0	0	0
186248900	2489 UV/Visible Detector	690	383	485	1,032	2,590	500	585	607	716	2,408	690	383	485	984	2,542	548	585	607	716	2,456	0	0	0	48	48	(48)	0	0	0	0	0
186299800	2998 Photodiode Array Detector	440	286	378	626	1,730	208	304	304	360	1,176	440	286	378	568	1,672	266	304	304	360	1,234	0	0	0	58	58	(58)	0	0	0	0	0
186269505	e2695 Separations Module w/o HC	336	150	60	217	763	163	211	210	254	838	336	150	60	197	743	183	211	210	254	858	0	0	0	20	20	(20)	0	0	0	0	0
186269506	e2695 Separations Module w/HC	820	450	694	996	2,960	594	754	783	959	3,090	820	450	694	896	2,860	694	754	783	959	3,190	0	0	0	100	100	(100)	0	0	0	0	0
186001515	1515 ISOCRATIC HPLC	29	20	0	3	52	3	12	13	13	41	29	20	0	3	52	3	12	13	13	41	0	0	0	0	0	0	0	0	0	0	0
186001525	1525 BINARY HPLC	18	19	22	27	86	27	31	34	41	133	18	19	22	27	86	27	31	34	41	133	0	0	0	0	0	0	0	0	0	0	0
186001825	1525 Micro w/Degasser	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WAT207000	515 HPLC PUMP	48	52	27	97	224	22	50	49	57	178	48	52	27	77	204	42	50	49	57	198	0	0	0	20	20	(20)	0	0	0	0	0

186015034	ACQUITY UPC2 PDA Detector	8	4	12	12	36	16	14	19	27	76	8	4	12	12	36	16	14	19	27	76	0	0	0	0	0	0	0	0	0	0	0	0	0	0
186015053	ACQUITY PDA Detector w/TaperSlit	5	5	0	9	19	4	5	5	9	23	5	5	0	9	19	4	5	5	9	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
186017002	ACQUITY Arc 2489 UV/Vis Detector	93	74	127	120	414	92	141	111	136	480	93	74	127	120	414	92	141	111	136	480	0	0	0	0	0	0	0	0	0	0	0	0	0	0
186017003	ACQUITY Arc 2998 PDA Detector	117	64	54	156	391	85	112	95	124	416	117	64	54	156	391	85	112	95	124	416	0	0	0	0	0	0	0	0	0	0	0	0	0	0
186017012	ACQUITY Arc Bio 2489 UV/Vis Detector	0	0	0	2	2	0	0	6	10	16	0	0	0	2	2	0	0	6	10	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0
186017013	ACQUITY Arc Bio 2998 PDA Detector	0	0	0	0	0	0	0	4	3	7	0	0	0	0	0	0	0	4	3	7	0	0	0	0	0	0	0	0	0	0	0	0	0	
186018006	ACQUITY Premier TUV TC	0	0	0	11	11	5	0	0	0	5	0	0	0	5	5	0	0	0	0	0	0	0	0	0	6	6	5	0	0	0	0	5		
186018007	ACQUITY Premier eLambda PDA	0	0	0	15	15	10	0	0	0	10	0	0	0	5	5	0	0	0	0	0	0	0	0	0	10	10	10	0	0	0	10			

Thanks,

Kevin Teo
Product Planning Manager
Waters Pacific Pte Ltd
phone +65 6593 7422 mobile +65 9733 5903
web www.waters.com email Kevin_Teo@waters.com
1 Science Park Road #02-08 The Caprioon Singapore 117528
[facebook](#) | [twitter](#) | [linkedin](#) | [youtube](#)

The information in this email is confidential, and is intended solely for the addressee(s). Access to this email by anyone else is unauthorized and therefore prohibited. If you are not the intended recipient you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly prohibited and may be unlawful.

Legal Disclaimer :

The information contained in this message may be privileged and confidential. It is intended to be read only by the individual or entity to whom it is addressed or by their designee. If the reader of this message is not the intended recipient, you are on notice that any distribution of this message, in any form, is strictly prohibited. If you have received this message in error, please immediately notify the sender and delete or destroy any copy of this message!